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*The American Journal of*

# CLINICAL MEDICINE

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JANUARY

MCMXIX

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AND TO THE SAFEGUARDING OF THE DOCTOR

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## EDITORIAL DEPARTMENT

When the Boys Come Home.....	1	Eye Lesions Produced by Mustard-Gas.....	5
The General Practitioner and the "Flu".....	3	The Volunteer Medical-Service Corps.....	6
Dr. Robert Gray is Eighty-Nine.....	4	"The Medical Review of Reviews".....	7
"Carry On".....	4	In Prospect and in Retrospect.....	8
The Venereal-Disease Problem.....	5	Our Honor Roll.....	10

## LEADING ARTICLES

Food Economics. BENEDICT.....	11	The Reeducation of the Blinded Soldier. ENGLAND	29
Camouflage. Artificially Induced Skin Diseases. SHERWOOD-DUWEN.....	15	A Study of Influenza and Epidemic Pneumonitis. GOLDSTEIN.....	34
Foot Troubles. COSMAN.....	23	The Treatment of Chronic Diseases. BUTLER.....	39
After Thirty Years—IX. RITTENHOUSE.....	27		

## WHAT OTHERS ARE DOING

Intravenous Medication in Syphilis.....	43	Strophanthus in Pneumonia.....	46
Mercury and Iodine Intravenously in Syphilis.....	43	Prophylactic Value of Quinine.....	46
Ipecac in the Treatment of Auricular Diseases.....	44	The Wounded "Yank".....	46
Intramuscular Injection of Cinchonine Salts in Malaria.....	45	Psychological Handling of Tuberculosis.....	47
In the Field Hospital.....	45	Artificial Pneumothorax and Pregnancy.....	48
		The Influence of Psychic Acts.....	48

## MISCELLANEOUS ARTICLES

Studies on Food Economics.....	49	The Etymology of Piu-Piu.....	57
The Story of Joseph Garufe, Private First Class, Company L, Third Platoon, Infantry.....	50	Is the Family Physician to be Replaced by the Cooperative Clinic?.....	58
Influenza as Treated By An Eclectic Practitioner.....	52	Our Roll of Honor.....	60
The Influenza Scourge.....	53	Physicians Wanted in Idaho.....	63
Toxic Symptoms in Infectious Diseases.....	54	Government Aid to Wounded Soldiers.....	63
The "Flu".....	55	Letters from France.—V.....	64
Doctor Waugh.....	56	The Eighty-Ninth Mile-Post.....	67
Concerning Homeopathy.....	56		

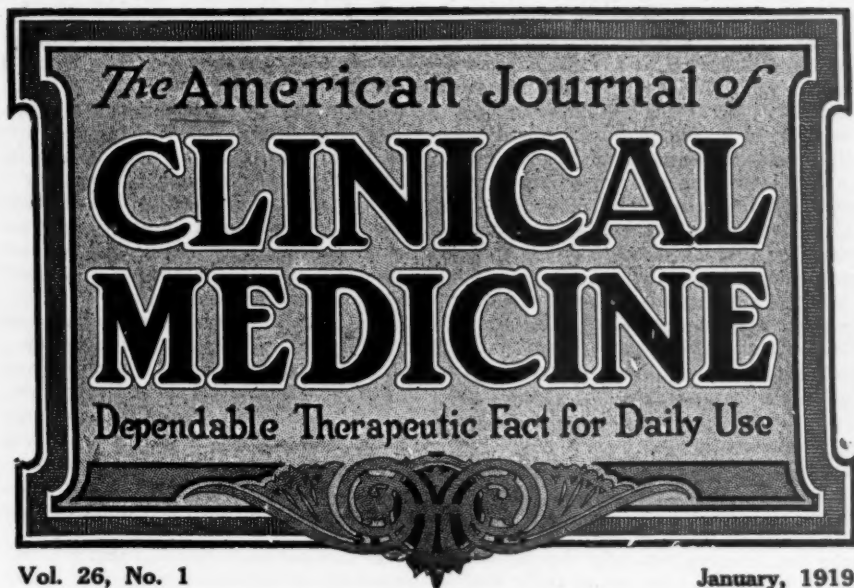
## AFTER THE WORLD WAR

The Making of An Army Medical Officer.....	69	AMONG THE BOOKS.....	77
JUST AMONG FRIENDS.....	73	QUERIES.....	81

## SPECIAL ARTICLES FOR FEBRUARY

Clinical Studies in Mental Diseases.....	DUVAL
Life and Psychophysiology.....	HASWELL
Meningitis.....	GOLDSTEIN
Valuable Hints From An Old Physician.....	JONES
Optical Diagnosis versus Digital Diagnosis.....	EVERETTE





## When the Boys Come Home

THE writer was in New York when the great ship Leviathan discharged a cargo of nearly 9000 returning soldiers, many of them wounded. Every day of our stay in the gay city of Gotham, one or more ships came in with their load of soldiers from France. The great flood is on, and already our boys are coming back to "the little old home town" which they left amid tears only a few short months ago. How different the homecoming! Mothers, sweethearts and wives are today bubbling over with joy and laughter, as they were overflowing with sorrow when the boys went away. Some of these will never return but, even for them, there is a sort of joy in the hearts of those dear to them because they faced the great crisis and died like men.

And, now, that the boys are coming home again, what are we going to do with them? Are we simply going to put them back in their old jobs and let it go at that? For many, perhaps most, this will be the answer to the question; but, there are thousands of our young men who can not be disposed of thus easily. They have seen another world and through contact with

thousands of other men in this country and other countries have learned to ask questions—and to some of these questions they are going to insist upon answers. Life can never be just the same as it was when the boys went away; primarily because they themselves are different, and because they have been factors in bringing about profound changes in the world itself.

As physicians, we know that these boys have helped us to settle some great problems of life and disease; and they know it. Most of them are better men physically than they were when they went away. They have learned to stand straight; they have put on weight and strength or rid themselves of superfluous fat. They have been guarded against venereal disease and protected against the ravages of strong drink. From a physical point view, army life is an ideal life. It makes stronger men, and, we believe, in some respects at least, better men. Are we going to let all this go by default when the boys come home?

No, we can not permit our boys to fall back again into the old ruts. What we have gained we must not lose. We believe

that there will be a demand for more thoughtful supervision of the youth of our nation. The boys themselves will demand it. They have seen the wisdom of physical training in their own lives, and they will demand it for others. While there is no need for a standing army in the United States and militarism, as such, must be at an end, there is a need for physical training like that given in the army; and, for this reason if for no other, we predict that some form of universal training will be provided.

One of the revelations of the draft system was the enormous amount of curable disease from which our young men are suffering—bad tonsils, bad teeth, hernias, varicocele, fallen arches, and underweight. Some system of training is needed to make men and women out of the millions of physically imperfect derelicts who go through life as cripples when they might be strong men and women. We predict that universal training for the future will take into account not only the physically sound, but those who are partially sound, so that it may be corrective of the entire life of the nation.

The social diseases must be eliminated. That is another of the lessons of the war. We must rid the nation of the habit of strong drink, of venereal disease, and of all other excesses that sap vitality. These are reforms which are bound to come and in which the medical profession is vitally interested.

In the industrial world, revolutionary changes are in progress. The writer suspects that our young men will bring back from Europe many ideas that to most of us will seem revolutionary. These ideas will be carried into the remote hamlets and will be discussed around every wayside country store. Just what effect this exchange of ideas between the old world and the new will have upon our social life, no one can tell; but, we have faith to believe that in the long run this effect will be good.

The Great World War marks the end of a great age and the beginning of a still greater one. As the last fifty years were characterized by an industrial growth that will remain one of the world's marvels, so, we may hope that the next generation will see the awakening of a great spiritual revolution that will mean far more for the enrichment of life than the railroad, the

telegraph, the telephone, the flying machine and the submarine.

It will be interesting to swap opinions with the boys about such things as these and to find out from them what kind of world they want to live in in the next fifty years. They have helped "make the world safe for democracy". What is their idea as to the meaning of the word "democracy"? We may find to our surprise that our boys know far more about these things than we do ourselves; and, naturally, the man who has lost a leg or an eye in a great cause will be asking himself and his neighbors whether the investment has paid out. Even a good job, or a public office, or a neat little farm, properly stumped and drained and financed by the Government, may not seem to him like quite pay enough for this loss. What will the great sacrifices in blood and treasure bring for compensation, in the way of happiness, opportunity, and growth for the men and women of the future?

The medical profession has sent a larger percentage of its membership into active service than any other. One doctor in five has worn Uncle Sam's uniform. More physicians have sacrificed their lives in proportion to their numbers than any other profession or trade. Not only have they stood beside the boys on the battlefield, but they have fought pestilence at home, where the risks were even greater than they were over there.

We wish we might give to the returning men of our profession that full tribute of praise that is in our hearts. In this war, as in every war, the doctor has risked most and sacrificed most, and in this war as in no other war, he has accomplished most. War is essentially and fundamentally destructive: medicine is preservative. Not thousands merely, but millions of soldiers owe their lives today to our profession. This, though true, may soon be forgotten. At this time there is no reason why the medical profession should not emphasize this great truth, if in so doing it can bring home to the universal consciousness the importance of the great preservative art for which we as physicians stand.

When the boys come home, the medical profession should make itself felt in every community. The great discoveries achieved on the battlefield should be carried to every nook and corner of America and made to

work for the enrichment of the life of the nation.

This is the message for the New Year we wish to leave with our readers.

Patients want to be treated. If physicians tell them that medicines are no good, they go to quacks who have, or pretend, confidence in their modes of treatment.

### THE GENERAL PRACTITIONER, AND THE "FLU"

In the discussion of Doctor Croft's paper on the recent influenza epidemic (this journal, Dec. p. 895), Dr. G. Frank Lydston asserted that during this epidemic the medical practitioners were a rather panicky lot; that they had permitted themselves to become scared because of the unaccustomed symptom-complex confronting them and also because of the fact that there was known no definitely established bacterial etiology of the disease and, consequently—*forsooth*—no "scientific" treatment. Doctor Lydston declared that physicians were needlessly frightened and that it was absurd to try to treat a disease when there were patients presenting fairly clearcut symptoms of illness, and who could properly be treated "for what ailed them."

If it were not somewhat humiliating, it would be amusing to investigate this matter a little further. It is very true that physicians were in a panic and that this reflected upon the people, who, consequently, were literally scared to death. To make a diagnosis of influenza, was almost paramount to suggesting engaging the undertaker, and in many instances the mortality rate during this epidemic was unduly high. This is true especially for places where large numbers of people congregate, as, for instance, in military camps.

Is there any truth in the implication that the intensive pursuit of the *science* of medicine limits the mental horizon of the physician and makes him helpless when confronting unforeseen contingencies or symptom-complexes that he can not explain "scientifically"? When the attempt was made (and evidently with favorable results) to prevent disease following after exposure to infection and also to modify the severity of an actual attack, by means of combined bacterins containing at least the greater portion of the microorganisms encountered in the secretions of the patients, this

method was discouraged from "authoritative" sources, on the plea that it was not "scientifically" established. Yet, experiences with a "scientific" bacterin containing solely the influenza-bacillus were anything but favorable, while the result secured from the "unscientific" combined bacterin in question were decidedly encouraging.

The remark may be interpolated here—in parentheses, as it were—that the infectious origin and nature of this epidemic disease appears to us indubitable. This, despite the attempt of Doctor Croft to incriminate some far-reaching vitiation of the atmosphere that, according to him, constituted the primary etiologic factor, all infectious conditions being only of secondary occurrence—according to him.

However, while "scientific" physicians fretted and impatiently waited the O. K. of the laboratory for specific procedures that they might undertake for the treatment of influenza, the majority of general practitioners quietly proceeded to treat their patients sick with influenza, and the joke of it is that most of their patients recovered. In the words of Doctor Lydston, these general practitioners, whose names, to be sure, do not adorn the starry firmament of medical leaders, but, who, nevertheless, do a lot of good work, simply went ahead and treated their patients for what ailed them; regardless of the name of the trouble. And, how did they do it?

There was the intense aching all over the body and the marked fever-temperature, associated with severe headache. On general principles, the indication was clear for an intestinal cleanout. Hence, a saline laxative or castor-oil, in some instances preceded by calomel, was prescribed as a matter of course. This, to start things agoing. The fever, headache, and pain in general were controlled with acetylsalicylic acid, phenacetin or similar drugs; given carefully, to be sure, and often while guarding the heart with strychnine, digitalis, monobromated camphor, and so on; but, given to effect, that is, until the patient's distress was relieved.

Then there were the evidences of infection—irritation and inflammation in the upper respiratory passages, coryza, pharyngitis, lacrimation, and all the rest of them. Gargling with antiseptic solution and washing out or spraying the nares and the

gullet did much to relieve these symptoms, while iodized calcium loosened viscid secretions, in addition to its mildly antiseptic systemic effect.

Manifestly, there was a condition of severe toxemia, in all probability owing to the overwhelming of the organism by various bacteria, the isolation and recognition of which did not interest the practitioner as much as did the overcoming of the toxic sequels. On general principles, he proceeded to fill up his patient with calcium sulphide or with echinacea. The result was, that pretty soon the very sick man or woman or child felt decidedly easier, say, on the second or third day, and that what looked like a severe attack of illness in the making turned out to be—just influenza.

These or similar experience are reported by numerous general practitioners of our acquaintance. By prompt, definite, and positive medication along clearly indicated lines, these men succeeded in preventing complicating pneumonia in a great majority of cases, and they are justly proud of being able to show a surprisingly low mortality rate, as compared with that reported from many centers of medical learning where a monopoly seemed to be held on it.

Of course, it is quite natural that conditions should arise that make the physician look exceedingly grave and apprehensive of serious trouble. But, that a whole class of professional men such as physicians should permit themselves to be stampeded by a scare of a disease, even though they do not know its exact nature, is little short of ludicrous. For heaven's sake, let us keep our heads, no matter what happens. No disease is so pernicious that it does not present certain features that make it possible for us to apply common-sense measures and, ordinarily, to overcome it.

Living exclusively on fruits for a day or two is an excellent way to cleanse and disinfect the alimentary canal as much as it can be. Fruit juices are cooling to the blood and they help the kidneys to throw poisons out of the body.—Babu Balwant Singh, in "The Antiseptic."

#### DR. ROBERT GRAY IS EIGHTY-NINE

We have just received from Dr. Robert Gray, of Pichucalco, Mexico, a letter and an article for *THE CLINIC*. In this, he reminds us that he has turned eighty-nine, and says that, despite his advanced age, he still is as well, physically and mentally, as he has been for many years, in fact,

feels younger. The article will appear in an early issue.

Since receiving this letter, a telegram has come in from Doctor Gray, reading as follows:

*"Calcium sulphide prophylactic of Spanish influenza. Mail 10,000 one-grain tablets."*

This is advice worth considering. Doctor Gray is a man of wide experience with calcium sulphide, so, when he says that it is useful in that disease, you can depend upon it that *he knows*, for, no man has used more of it than has our old friend Robert Gray.

#### "CARRY ON"

*Carry On* is a little journal issued by the office of the Surgeon-General, U. S. A., and intended for the information of those directly interested in the development of reconstruction work. No subscription-price is charged, and those men and women who come within the scope of "subscribers" may put in a request for copies. The editorial office, which is located at 311 Fourth Avenue, New York City, requests that persons asking for copies give, besides name and address, also their occupation.

The October-November number, which is number 4, contains various contributions dealing with what happens to the handicapped soldiers and sailors upon their discharge from the service. The vocational-rehabilitation law passed unanimously by Congress and signed by the President last June provides that it shall be the duty of the federal board for vocational education to see to it that every disabled soldier and sailor entitled to compensation under the war-risk insurance law is aided in getting his old job or securing a new one. The board is required, furthermore, to give to those handicapped men that need and desire training before going into employment so much education at the expense of the federal government as each man may elect; providing, of course, that his claims are reasonable and that his previous training and the nature of his handicap are not such as to make training useless.

Under this beneficent law, thousands of our returned men will have the opportunity of learning new and useful trades before they reenter industrial life. Its practical workings will go far toward les-



sening the discouragement and misery inevitably following upon the realization of serious injuries and mutilations suffered during the war.

It is the desire of the government to help in every way possible, to make all disabled soldiers over into useful and active members of the commonwealth, that they may not be a burden to anybody, least of all to themselves; rather, that they shall realize that not alone their government, but, their country is grateful for what has been done by our soldiers and is anxious to rehabilitate and reinstate all returned soldiers and sailors in useful and active occupations.

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The man who holds the ladder at the bottom is often of more benefit to the world than the one who climbs to the top.

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### THE VENEREAL-DISEASE PROBLEM

One of the outstanding difficulties in the successful management of the problems presented by venereal diseases is, the old-established habit of people to make light of their afflictions and to treat themselves with the assistance and connivance of some unscrupulous or ignorant drug-clerk. The shelves of drugstores are filled with patent medicines that, in veiled, but, nevertheless, unmistakable language, promise a speedy cure for diseases that admittedly yield only to persistent and continued treatment carefully regulated according to the individual peculiarities of the patient and to given, momentary conditions.

Many attempts have been made to include venereal diseases among those that are notifiable and, consequently, subject to control of the health-authorities. As in so many other matters, any laws, rules, and regulations adopted could not be enforced unless the popular opinion was in favor of such enforcement; and while, with respect to venereal diseases, the disastrous "conspiracy of silence" still holds sway to a certain extent and the fetish of personal liberty is being invoked, in every possible way, the purposes of the health-department regulations are constantly being defeated.

Once popular opinion decides that venereal diseases, the so-called social diseases, constitute a serious menace to the social welfare, regulation of this problem will become possible. In the meanwhile, the carelessness of patients has been fostered by the

willingness of druggists to "help them out" by furnishing such remedies as are believed to be "good for" those maladies.

It is with a great deal of pleasure that we take cognizance of an announcement by the Owl Drug Company that, after December 1 last, no preparations for the self-treatment of venereal diseases will be sold in the 29 retail stores of that company located on the Pacific Coast and in the Middle West. When preparations of this nature are called for, the salesman is instructed to explain the new policy of this concern and to hand the customer a carefully prepared confidential circular, which explains the seriousness of all venereal diseases and the importance of consulting a reliable physician. A list of such will be furnished upon request.

Standard preparations, recognized by the medical profession, will be carried by the prescription-department, however, and sold only upon orders from a physician.

Some weeks previous to this announcement, the laboratories of the Owl Drug Company discontinued the manufacture of several preparations for self-treatment.

This innovation was decided upon after the management had given due consideration to the report of the Surgeon-General of the U. S. Army, which showed an alarming prevalence of venereal diseases among the civilians that were examined preparatory to entering the army.

The action of other druggists will be awaited with interest.

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### EYE LESIONS PRODUCED BY MUSTARD-GAS

The abrupt termination of the war brought an end to a large amount of interesting research-work. For instance, the introduction of poisonous gases in warfare made it necessary to develop means for combating them! American research-workers have been struggling valiantly with this difficult problem, and undoubtedly had it almost solved—possibly entirely solved. As to this, we do not know.

One of the most interesting pieces of work that we have seen is that conducted, at the University of Michigan, by Warthin, Weller, and Herrmann, upon methods of combating poisoning with dichlorethylsulphide, commonly known as mustard-gas. Mustard-gas, as almost everybody now knows, is an intense irritant of every tis-



sue with which it comes in contact, and, as it is a heavy gas, it settles into every little hole and depression. Also, since it was used by the Germans in explosive shells, it soon covered the ground and foliage of the battle-terrain, so that the utmost care was necessary to prevent the soldiers fighting over this ground from becoming seriously poisoned. The peculiarity of these burns was the fact that they did not appear immediately after contact, but, as a rule, only some hours afterward, increasing in severity and, eventually, if the amount of gas coming in contact with the skin and mucous membranes was sufficiently great, resulting in deep necrosis, involving extensive destruction. These skin burns were not easily prevented and were hard to treat.

One of the discoveries made late in the war was, that mustard-gas is neutralized by contact with chlorine, and various applications had been made of chlorine-carrying compounds to skin and mucous membranes for protective purposes. Dakin's solution, chlorazene (as chlorazene surgical cream) and dichloramine-T-chlorcosane were all employed, with most excellent results, in the treatment of these burns.

One of the most interesting pieces of work in this connection was, the study made of the ocular lesions. Contact of the gas with the eyes causes an intense irritation, with degeneration of the corneal and conjunctival epithelium, and, if strong concentrations come in contact with the eye, more or less complete necrosis of the cornea, extending throughout its entire depth. Secondary infection is prone to occur, the result being a considerable destruction of tissue, which in turn frequently resulted in the impairment of vision and only too often in complete or almost complete blindness.

After trial of a variety of remedies, including boric-acid solution, colloid-silver preparations, cocaine, and the various common ophthalmic antiseptics, the investigators turned to the use of dichloramine-T in chlorcosane, which had been recommended by various writers for the treatment of infective conditions of the eye, such as trachoma. "Our experiments," they say, "showed that this solution, if applied to the eye before exposure to the gas, has a definite prophylactic action, and that, when applied before and after exposure, the resulting lesions are much less severe. In

cases in which the exposure extends over a period of several hours, the administration of dichloramine-T in chlorcosane causes, naturally, no change in the intensity of the lesion. Here, its after-use is indicated for its germicidal action and the prevention of secondary infection. It seems to us likely that instillations of dichloramine-T in chlorcosane solutions could be used as prophylactic methods on the battlefield during a known gas-attack, and that, in cases of severe eye injury caused by dichlorethyl-sulphide, its use should be continued, for the purpose of preventing secondary infection."

If the war had continued, it is probable, in view of these experiments that dichloramine-T-chlorcosane would have been generally employed by every soldier prior to "going over the top", for the purpose of protecting the eyes against mustard-gas irritation. It is also probable that either chlorazene cream or dichloramine-T-chlorcosane would have been recommended, for the same purpose, for general application to the body, as well as for the treatment of the lesions caused by this gas.

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There is a principle which is a bar against all information, which is proof against all argument and which cannot fail to keep a man in everlasting ignorance, this principle is, contempt prior to examination.—Capt. Cecil Webb-Johnson.

### THE VOLUNTEER MEDICAL-SERVICE CORPS

This organization, which owed its existence to the desire among those physicians that are prevented from joining the Medical-Reserve Corps, as also to the desire, on the part of the Surgeon-General of the army, to have available a complete list of all physicians upon whom he might call on for special service, has vindicated its existence splendidly in the recent epidemic of influenza. Last September, the Surgeon-General of the United States Public-Health Service, who had been charged with the national measures that were to be instituted for limiting the spread of the epidemic, requested the president of the central governing board of the Volunteer Medical-Service Corps to mobilize fifty units of the organization, each to consist of ten physicians, for emergency service in connection with the prevention of, and relief from, influenza. In response to this request, the names of the five hundred physicians asked for were

furnished within seventy-two hours. Three days after the first call, a request for another five hundred physicians issued from the Public-Health Service and, by October 1, the names of 1,135 physicians had been furnished, from among whom more than the necessary number were obtained. Since then, additional offers of service have been received and transmitted to Surgeon-General Blue for his reserve list.

In this manner, the Volunteer Medical-Service Corps promptly made good upon the first demand made upon it for assistance in an emergency and has thus justified its right of existence.

At the same time, the emergency that has arisen and was met so splendidly in the manner outlined illustrates the necessity to have attached to the United States Public-Health Service a reserve organization that can be mobilized in times of emergency.

In *Public Health Reports* for October 25, it is recorded that, with the widespread occurrence of influenza in the vicinity of Boston and the unmistakable signs of its starting elsewhere, urgent calls were addressed to the United States Public-Health Service to furnish medical and nursing relief to stricken communities. All available regular officers were detailed to the stricken communities, but, the number available for such detail was insignificant compared with the urgent need occasioned by the epidemic. Moreover, the bureau had no nurses available for service in epidemics.

In addition to his call upon the Volunteer Medical-Service Corps, the Surgeon-General issued similar requests to the Red Cross, the medical and surgical professions as a whole, and to the general public for volunteers to help combat the epidemic. At the same time, Congress was appealed to for a special appropriation to meet the expenditure requested by emergency. The necessary fund of \$1,000,000 was promptly voted and granted.

More difficult than the securing of volunteer physicians was the problem of supplying nurses, for, it was found almost impossible to discover nurses or trained assistants that were not already extremely busy in urgent medical work.

Nevertheless, a limited number of nurses and trained attendants was secured by the American Red Cross and mobilized for emergency service in the communities most

severely affected. In addition to this, the attention of local communities was called to the valuable nursing-work that could be rendered by intelligent volunteer workers, such as school-teachers, especially when they are directed by trained graduate nurses. In many communities, the organization of this group of nursing personnel has done much to relieve the serious emergency caused by the lack of trained nurses.

It was made clear from the outset that the United States Public-Health Service desired to aid, and not to supplant, State and local health-authorities in their work. Accordingly, instructions were issued that all requests for medical, nursing or other emergency aid for dealing with the epidemic should come to the United States Public-Health Service only through the State health-officer. Moreover, as soon as possible, all this epidemic-work was organized on State lines, with a representative of the United States Public-Health Service detailed to each State to secure the best-possible organization and coordination of health-activities of the service; in others, the executive of the State board of health has been given appointment in the United States Public-Health Service as field director.

While the activities of the doctors and nurses working under the Public-Health Service are generally limited to those ordinarily regarded as preventive health-measures, emergency conditions in some communities have been such that much medical relief work has had to be undertaken. This was the case, for example, in several communities where the few practicing physicians were themselves stricken and where the people were in urgent need of medical attention.

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Never be satisfied with yourself! Always be discontented with your present success and strive ever for higher things.—Margaret B. Owen.

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### "THE MEDICAL REVIEW OF REVIEWS"

The last few years have witnessed notable changes in the medical press of this country, a number of the lesser journals having suspended publication and most of them having been absorbed by more prosperous competitors, either with or without retention of their former names. In a way, this tendency is to be applauded, since it goes without saying that an undue

number of medical journals unavoidably occasions much scattering of effort, and, consequently, the suppression of part of these multifarious publications may be looked upon as contributing to real progress.

The absorbing of other journals has been prosecuted somewhat industriously at 12 Mt. Morris Park, New York, Dr. William J. Robinson, the editor of *The Critic and Guide*, having acquired ownership in several other medical journals. A short time ago, *The Medical Review of Reviews*, which is under the management of Doctor Robinson's son, Frederick H. Robinson, incorporated with itself *Pediatrics*, a journal that for many years had been a welcome visitor to pediatricists and general practitioners alike, because of the truly excellent work that it accomplished in medical literature and also because of its having been devoted more particularly to the diseases of children.

Now we are informed that *The Buffalo Medical Journal*, edited for several years by Dr. A. L. Benedict (well known to CLINIC readers) also has been taken over by *The Medical Review of Reviews*, and lastly, that the latter journal has purchased, for consideration, *The Southern Practitioner*.

*The Medical Review of Reviews* has experienced a marked revival since its destinies have been guided by Mr. Robinson. Not only are its editorial pages characterized by much erudition and brilliancy of thought, but, the original contributions also present communications of lasting value, while the abstracts from current medical literature presented to its readers show care and thought in their selection. *The Medical Review of Reviews* is one of those journals that are worth while. In its enlarged form, including, as it does, several well-known and excellent other journals, it bids fair to surpass even itself, if that be possible. We wish our contemporary every success in its enlarged sphere of activity and hope that it may continue its good work for the benefit of the medical profession for many years to come.

Nihilists and destructive critics have done much to lower medicine in the estimation of the people.

#### IN PROSPECT AND IN RETROSPECT

The other day, sitting in a restaurant, I overheard a man behind me say: "Twenty years is a long time to look ahead—to look

back it is like the flash of an eye." This saying, trite as it is and camouflaged with the hoariness of age, arrogates to itself a degree of truth that would be astounding if it were justified. As a matter of fact, like most commonplace sayings that fall so glibly from the tongues of certain wiseacres, it is an old chestnut and, like most old chestnuts, it harbors within it an element of untruth that deserves to be nailed down.

Twenty years is a long time to look ahead; most true. Don't we all remember the time when as kiddies we teased Dad and Mother about how soon we should be grown up? At the age of six or seven years, twenty-six means the mature age of accomplished manhood and womanhood; while we who have turned the milestone of the half century look back to that period of all-inclusive and overpowering wisdom smilingly, half sorry for the Oh! so long, long ago. We look back twenty years, we look back ten, five, two years, or even a twelve-months and see what all has happened in those long toilsome days, in those stretches of weary nights of which we yet think as long since gone and done with. One year ago, even; three hundred and sixty-five days and three hundred and sixty-five nights. It is a lifetime full of intense feelings and rich experiences. It is a succession of ages not only to look forward to, but to look back upon, for those who are not fortunate enough to be blessed with some absorbing occupation but who dally and idle their lives away or for those who through some misfortune or on account of some misdeed are obliged to pass their days in confinement or, at any rate, away from congenial surroundings.

Occasionally we may meet some invalid who has lain on his bed of suffering for ten, fifteen, twenty years. Ask him, or her, whether they can look back upon their life in the flash of an eye. Every day was and endless torture, every night an eon of suffering. And, they all have left their indelible mark and will never be forgotten.

Ask the man who has been freed after twenty years of confinement in prison whether he can look back upon this time as in the flash of an eye, he will tell you that he lived countless long, tedious lives in those twenty years, lives full of weariness and discouragement and despair that

stretch out in retrospect without a limit to the beginning of time. Ask the factory worker who is "an old employe" whether the twenty years that he spent behind his bench or in the shop seem short to him now, and he will tell you that they represent an interminable series of grinding days and toil-stunned nights. Ask the traveler or globe trotter who has spent the best years of life exploring the recesses of the earth, the pinnacles of mountains, the courses of streams and rivers, whether his experiences return to his eye kaleidoscopically, rapidly, swiftly, not, perhaps, like the flash of the eye, but, like the screen in the moving picture, let us say: and he will think back for hours and days, mayhap, over the experiences that have come to him in those twenty cycles of the earth around the sun, with their long laborious days of marching or climbing or riding and interminable nights of watching and possibly fighting; twenty years of work and effort. Ask the ordinary citizen, the business man or the professional man whether he looks back upon the last twenty years of his experience like the flash of an eye, and he will tell you that to him they represent a continued series of difficult problems which he lives over during minutes or hours but which, nevertheless, seem long drawn out and endless even in memory.

No, No, these old sayings that are scattered so freely beneath the branching chestnut tree are misleading and false. Twenty years is a long period to look back upon, just as it is illimitable in prospect.

But, let us look backward and forward for just one short year. One year ago, to be personal, we started upon the twenty-fifth year of our experience as a medical journal. We were rather proud of the fact and strutted a little. Can you blame us? From what you, the readers of *CLINICAL MEDICINE*, have told us and are telling us constantly, we have succeeded in our aim to present to medical practitioners a journal which helps them in their daily tasks, in their constant effort to alleviate disease and suffering. We infer that we have been successful in making the lessons that we attempt to teach free from dryness and monotony. It has been our pride to have *CLINICAL MEDICINE* "human." We have everlastingly been endeavoring to get under your skin, talking to you as man to

man, mindful of the fact that your patients are not "cases" but human beings who want to be treated, not by the rule of three, but, as creatures with sensibilities and feelings whose inner workings have become disarranged and whose mentality therefore has suffered even though possibly no mental affliction existed.

So, we were just a little proud of what we had accomplished at the beginning of the last year that should make the first quarter-century of our existence. In this last year we have visited you twelve times, sending you our messages, following the progress of the world war in so far as it was of interest particularly to physicians, taking note of many important lessons learned and passed on by our colleagues in field and in camp, and we have greeted with loud acclaim, like everybody else, the cessation of hostilities and expressed our sincere hope that this would end the war and would initiate a long period of peace on earth; while at the same time we expressed and acted upon our intention to do our share as far as lay in us toward the restoration of all that is disorganized and that requires reconstruction, during this perhaps the most important and serious period that civilized mankind ever has passed through.

It was a long time, these twelve months, these three hundred and sixty-five days; a long and weary period to look back upon, lightened, though, by the joy of the last two months since the signing of the armistice which brought renewed courage and joy to many hearts.

And, so, we look forward to one year, believing it best to accomplish our tasks one at a time, holding it to be wiser to plan definitely for one year ahead, since it is just the immediate present that is ours, while the remote future is in the lap of the gods. What will the coming year bring? We do not know. We hope to continue making *CLINICAL MEDICINE* just what it should be for your benefit. We hope to help you in your daily tasks and problems; we hope to inform you of new discoveries that are being made, of new things that are observed, and we hope to be permitted to share in the restoration of the world as far as may lay within our sphere. So we look ahead to twelve numbers of *CLINICAL MEDICINE* which will comprise the first volume of the second

quarter-century of our existence. It is a long time to look forward to. There will be work, there will be study, there will be pleasant experiences and there will be discouragements; but, with it all, the lesson is impressed upon us to take each day the work that is for us to do and do it as well as we can, putting forth our best efforts and leaving the result to that Beneficent Law that works out to its own wise ends all happenings and all acts of mortals.

There existed, at one time, a very beautiful custom in Germany, which it would be well to imitate everywhere. On the first day of the New Year, whatever may have been the quarrels or estrangement between friends and relatives, mutual visits were interchanged, kindly greetings given and received—all was forgotten and forgiven. Let this custom begin with reconciliation to God, then friendship and fellowship may be found that shall be blessed and lasting.—Foster.

#### OUR HONOR ROLL

On pages 60 and 61 on this issue, we publish a list of the representatives of The Abbott Laboratories, the Slee Laboratories and THE AMERICAN JOURNAL OF CLINICAL MEDICINE who have served our country in the Army and Navy during the great war. We also reproduce their pictures as far as we are able to do so.

Needless to say, the men whose names appear in the Roll of Honor are not the only representatives of the three institutions concerned who "served their country." Never before has any war been so much a people's war and never before has the whole nation, men, women and children, participated so wholeheartedly in promoting the cause for which the government had found it necessary to declare war. Therefore, we stay-at-homes whose names do not appear on the roster, nevertheless,

may feel that we also have served our country. Of our own editorial staff, Dr. Alfred S. Burdick served constantly and efficiently as a member of Draft Board, Exemption District No. 59, while Dr. H. J. Achard served with the other medical examiners on this board. He also spent much time as medical attendant to the dependent families of soldiers and sailors. A large amount of clerical work connected with draft-board and other patriotic activities was accomplished in the offices of CLINICAL MEDICINE, many of the young ladies gladly donating their evenings and Saturday afternoons to this work. However, we sent those who were available forth to wear Uncle Sam's uniform in the battlefields, in camp, and in other phases of active service.

The names of these fortunate ones, as their pictures appear in the page facing the Roll of Honor, are as follows:

1. Al. Stiles.
2. Raymond Ranson.
3. Chester E. Brush.
4. A. A. Leibold, D. V. S.
5. A. G. Brown.
6. Ewart L. Shattuck.
7. George E. Burdick, M. D.
8. Arthur Miller.
9. Elwyn S. Meyers.
13. F. N. Cooper.
14. G. Gustafson.
16. H. P. Jones.
17. C. S. Curtis.
18. Arnett Selig.
20. Valentine Fernekes.
21. S. Dewitt Clough.
23. Richard Slee, M. D.
24. Arthur M. Slee.
25. Chas. J. Moss.
26. Roy E. Thumberg.
27. C. M. Hotchkiss.
28. R. W. Dewar.
21. Karl H. Hall, M. D.





# Leading Articles

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## Food Economics

By A. L. BENEDICT, A. M., M. D., Capt. M. C., U. S. Army, Buffalo, New York

*EDITORIAL COMMENT: The coming of peace and the period of reconstruction involves many problems for the solution of ourselves, our Allies, and our late enemies alike. Among these, one of the most important is that of food economics. Doctor Benedict presents in outline some of the salient points on the subject that may well be studied carefully by physicians.*

**I**N war, the relation of price to physiologic and esthetics value, adulterations, even, within certain limits, wholesomeness are subordinated to the prime necessity of having an ample supply of the best standard foods for the army. Extravagance may be allowable and even encouraged, in order to conserve staple foods; and, while prices may be directly or indirectly controlled by the government, contrary to peace precedent, the aim may be to discourage civilian use of certain food stuffs as well as to protect the people against profiteering.

With the advent of peace, there begins a transition-period toward the restoration of ordinary economic rules, although the continued necessity of providing foods for other nations and the varying conditions of available stocks of different foods and of facilities for transportation will require adherence to war regulations for some time to come; and these regulations may appear inconsistent because of the policy to apply them only according to the actual conditions obtaining for any particular food-stuff at any particular time and place.

The ultimate principles of food economics are the same as for any other commodity, and they can not be sublimated beyond the prosaic demand of the ultimate purchaser to get the best value, for his labor, with due regard both to physiologic and esthetic standards. Nor can we get away from the hard fact that values have been measured for many centuries in terms of gold or other forms of money ultimately based upon the ease or difficulty of procuring gold. Consequently, we must dismiss

the former pretense of indifference with regard to price and the various other affectations that have been applied to food even more than to dress and other personal necessities and to domestic, as contrasted with commercial transactions.

### The Economic Crime of Wasting

The affectation of liberality in serving, of daintiness in eating, the reduction of such policies to an actual rule of etiquette that the plate should never be entirely cleared, overrefinement of the proper objection to the re-use of broken food, laziness in domestic conservation, lack of insistence upon the same care to avoid waste by domestic servants as by employees in factories, all this has resulted in an average waste of at least 10 percent for the entire country, and up to 50 percent in the case of many families.

It is not a joke to say that, hitherto, we have all too literally been following the mental process of the garbage-man and have judged the social status of ourselves and our neighbors by the "elegance of the swill". In military cantonments, there was, at first, an enormous waste of food; which, however, was systematically combated. As extreme examples may be mentioned: a large canful of wheat bread thrown out by a single company and the reduction of the waste for one day for a unit to slightly larger than 5 ounces.

### Fallacious Household Economics

Fallacies about preventing waste should not be neglected. So-considered cheap foods often are dear at any price, except as appetizers, because of their small content

of nutriment—the commonly used vegetables popularly considered hearty and sustaining being for the most part nothing but cellulose and water and useless, in the limited sense, for nutrition. Cheap meats, as a rule, are expensive relatively to their net nutriment, while, even if tables show a high caloric value, this usually is due to fat, which could be more economically purchased than at meat prices and which many persons can not or will not eat.

Small-scale domestic methods of economy, by making fats into soap, ordinarily are absurdly costly in labor, fuel and materials. There is an unavoidable waste of about 25 percent in the "peelings" of all fruits and vegetables, and this waste may be greatly increased by careless methods. However, an order to avoid this waste by serving potatoes et cetera in the skins, may defeat its object if they are dumped into gravy or vegetable juice on plates, so that the individual simply squeezes or cuts out as much of the interior as is convenient without too much soiling of the fingers. Bread puddings and various similar desserts are, by many persons, considered adequate only when the bread or other cereal remnant is diluted and concealed with costly material, thus rendering it undetectable. Many analogous fallacies occur in vain efforts to prevent waste, instead of following the simple principle of buying, cooking, and serving only what is to be actually used and of utilizing the inevitable excess in simple and direct ways.

#### Utilization of Unavoidable Food Waste

Generally speaking, the utilization of unavoidable food waste, including that which is practically inedible or even innutritious for human beings, is best accomplished by feeding it to pigs. Rendering into fat and fertilizer is less economic, but, often, better, for practical purposes, by municipalities, while questions of expense, of transportation, labor, availability of market, et cetera, often necessitate destruction, while sometimes, by mixing it with other waste, some fuel-value can be derived. The marked diminution of incinerators at cantonments, in the course of the last year, represents not only a tremendous saving by the utilization of garbage, but, in fuel, labor, and damage from smoke.

#### Application of Ordinary Economic Principles to Food

There are obvious reasons why wholesale prices should be lower than retail

prices, why incidental expenses for transportation, bookkeeping, overhead charges, labor, et cetera, should be added to the price of various commodities, why the transient and especially the nonresident customer should pay a higher price than the regular, resident patron. Still, there is no reason why these factors should apply to food and a few other services to a greater intrinsic degree than to any other commercial transactions. It is doubtful whether a meal can be served, under conditions as ordinarily demanded, for less than a 100-percent gross profit on the cost of the raw food; however, there is no reason why the purchase of food by the meal, wherever one happens to be, should exceed by 500 to 1000 percent the cost of similar food and similar accessories at home.

Furthermore, the labor of serving food, even that particular form of labor which carries the food from the kitchen to the table, should be adequately paid; there is no good reason, though, for paying for it twice over, and at rates far beyond its true value, in the form of a gratuity that debases the laborer. Of course, we dislike to break an established custom, especially as it involves much personal discomfort. We are, moreover, indifferent to the fact that the custom has exerted such a serious influence that it is accepted legal precedent that a waiter has not the status of a witness or juror of average vocation. Indeed, we affect not to realize that, in the aggregate, the tip, in itself, is a serious factor against the same convenient use of readymade foods, to borrow an expression from another trade, that under similar conditions is applied to most other commodities.

#### The Stabilizing of Food Prices

Statistics show that the dollar of 1918 had a purchasing power of 59 cents as compared with that of 1914. Experience seldom shows that the individual enjoyed only 59 per cent of the standards of comfort of the year 1914 on the same total outlay or that his expenses increased to 169 per cent in securing the same standards as prevailed in 1914. It is doubtful, whether, in the whole, the difference amounted to 10 per cent.

The discrepancy is accounted for by two well-known economic principles that should have accompanied the statistics, namely:

1. Most commodities, including food-stuffs to a considerable degree, can be

carried over for considerable periods to cover seasons of high price.

2. To serve any particular need, a cheaper substitute can usually be found in an emergency or even by choice, without its being materially inferior.

In ancient and medieval times, governments regularly prepared for war and against failure of crops by carrying large stocks of grain and other commodities. The same course would be practicable today. To a considerable degree, this would protect the consumer against necessary or speculative increase of price and the producer against the loss from a temporary glut of the market, while the whole country would gain, almost every season, the enormous waste of individual foodstuffs left to rot on the ground because the market-price did not sufficiently pay for the labor of collection. The statement that such a scheme would be practicable is based upon known facts as to the keeping-properties of various foodstuffs, under refrigeration, after desiccation or for grains and cereal flours generally, or merely under ordinary care against the effects of the weather. The necessary methods are, indeed, already in operation (merely as business procedures for securing private profit) on a sufficiently large scale to insure their practicability on a greater scale.

#### **As to Governmental Control or Ownership**

Popular sentiment has been educated, especially by war-policies, to accept the general proposition that food is as necessary a public utility as are transportation or civil or military protection. Intelligent supervision of production, transportation, and dealing in foods should be continued. The wanton wholesale destruction or waste of foods, for the purpose of maintaining high prices, should be dealt with in accordance with the fact that food represents life. And the same principle should apply to all forms of artificial manipulation of prices wherever it exists.

It is difficult to get rid of the preconceived idea that concentration of industry of any kind and management on a large scale should result in economy and low prices. In some few lines, this idea has worked out in practice, yet, we find almost always that the cost of living rises as cities become larger and the milk industry, other dairy industries, meat industry, and cooperative-farming movements have, as a rule, resulted in increased prices, just as the mod-

ern laundry has increased the cost of cleanliness.

How far the explanation rests with the demands of organized executives and trained business men, and of the subsequent and logical demands of organized as opposed to disorganized individual labor, and how far the increase in ultimate cost might be avoided by proper governmental control, is an open question.

It must be conceded that, in general, meat, milk, and other foods handled by large corporations are of better quality than formerly; also, that the prices have been increased by general factors applying to all industries and ultimately resting upon the fact that the real unit of value is labor, and that, if labor is rated higher in dollars and cents, money will have a lower purchasing power, exactly in analogy to the fact that, if gold goes above the par value of currency, the latter will become debased.

Another serious fallacy that applies to foods is the "producer to consumer" theory. In plain words, the fruit-raiser, the market-gardener or the chicken- and egg-raisers has done precisely what the manufacturer has done: kept most of the jobber's and retailer's profit for himself. If anything, the producers of food have gone further than have the manufacturers in expecting the direct purchaser to take the whole burden of transportation and to pay an excess-price, on the ground that the foods are fresh—ignoring that the purchaser is the one who eliminated the necessary or accidental delays of transit—or of superior quality, which may or may not be a fact. The general experience in regard to the expected influence of good roads and automobiles is, that they have increased the cost of foods and have demonstrated the practical necessity of a properly conducted and reasonably simple system of middlemen.

#### **Questions of Supply and Demand**

Too much should not be expected of the law of supply and demand. Demand is by far the stronger element, and the demand of the man whose business it is to produce or to deal in a special article or class of articles is far stronger than that of the ultimate consumer distributed among a large number of producers and dealers, each of whom represents only a small portion of his particular aggregate expenses. An excessive supply temporarily decreases prices, but, ultimately discourages produc-

tion and rapidly tends toward an equilibrium. Thus, for example, about twenty years ago, there was a tremendous crop of potatoes, so that the retail price in cities fell to 25 cents a bushel. Most farmers, having received less for their large crop than for a small one, became discouraged. A few, however, planted potatoes for the next year and realized on them a large profit.

On the other hand, a demand in excess of supply, while temporarily increasing prices, tends, if it is steady and reliable, to increase production, so that prices fall. Thus, when oranges were beginning to be sold at prices so low that one was amused at Goethe's having thought it worth while to write a poem to accompany a gift of two oranges, it used to be said, jokingly, that oranges might some day become cheaper than apples. The crossing of the price-curves of these two fruits has logically occurred, in accordance with the law of supply and demand, although in an exactly opposite way from the usual conception.

The facility with which businesses may be changed or modified is one reason why fluctuations of supply and demand will not permanently alter prices beyond the limits of willingness of producer to sell or of the purchaser to buy. This applies especially to the supply of milk and its derivatives. It would be very sensible for healthy adults to drop the use of milk as a beverage, and it would appear that the price of the milk for infants, invalids, and the necessary domestic uses would thus be restored to the former normal standard. But, the distributing forces could be easily demobilized, centers of municipal distribution would divert the milk to the manufacture of ice-cream, buttermilk, butter, butter substitutes that are using part milk or cream; or, if these centers were not willing to pay the original price to the producer, shipping-centers would be converted into creameries or else the dairy farmers would convert milch-cattle into meat or sell the animals into more remote parts of the country where the hilly nature of the ground makes ordinary crop-farming unprofitable, but, where cheese-factories exist or could easily be established. Meanwhile, the original dairy-farms would be available for market-gardening, sanitariums, golf-clubs or suburban real-estate tracts.

It is not the intention to prophesy that exactly this course would be followed or

that exactly the same processes of demobilization would occur about each municipal center, but, merely to indicate that the various steps of milk production, conversion into other dairy products, and delivery are liable to rapid adjustment according to fluctuations in demand for any particular milk product or for milk in general, so that the law of supply and demand would result only temporarily, at most, in a reduction of price.

#### Practical Application of Economics

The law of supply and demand is, to a certain degree, amenable to the interests of the ultimate consumer, if he understands and follows its details practically and promptly, largely with regard to the principle of the use of substitutes. For example, the various mammalian meats are, for practical purposes, interchangeable, analogous cuts having nearly the same nutritive values. One who buys at any period or day whatever meat occurs to him as a choice, without regard to price, especially by telephone, will, in the long run, pay about 50 percent more for the same quality, quantity, and variety than one who selects from day to day whatever meat is cheapest and who avoids, for periods of several weeks, any particular kind that happens to be beneath the normal production. Such a course not only reduces individual expenses, but, automatically tends to secure a general maintenance of a price fair alike to producer and consumer. Approximately owing to differences of composition, and especially of waste, the actual *quid pro quo* is the same when the price, per pound, of lean mammalian meat equals that of a dozen of eggs, it is double that of poultry per pound, and quadruple that of small fish per pound. In this connection, the fallacy of general strikes against high price for any given foodstuff is easily seen. A few years ago, a general meat-strike was called. This gave ample warning all along the line to slow up supplies. Fish were largely used as a meat substitute, at an apparent saving of 50 percent by weight, but, at an actual doubling of the cost of the nutriment furnished. The fisheries profited, retailers were embarrassed only by transient losses and the necessity of slight change in wholesale marketing. Meantime the popular appetite for real meat was whetted and the ultimate demand for meat at the original price prevented

any loss by the meat-industries, except for the transient slacking of business.

A general, continuous policy of selective buying according to real food values would produce the desired result, up to the point at which the demands of the successive producers and dealers would remain firm—namely, at the average profits or wages demanded for comparable industries in general.

Here may be mentioned another economic principle the neglect of which probably operates to decrease the value of the purchase of food, in proportion to expenditure, more than of any other commodity. Many persons assume that certain articles are inevitably and permanently luxuries, and beyond the means of the average. Thus, in the meat-strikes already mentioned, the great majority of purchasers bought small fish at, say, 10 cents a pound, believing that the larger and better fish at 20 cents were luxuries, even though, with reference to the net nutriment, the latter actually were cheaper. In inland communities, there is quite a general belief that salt-water fish are expensive luxuries, whereas, owing to the greater average size and proportionately less waste, they often, if not usually, are more economic than fish from nearby sweet waters.

The idea of many housewives as to the expensiveness of olive-oil is so firmly es-

tablished that they often fail to realize that "a pint is a pound" and that olive-oil often is less costly than butter. This idea is closely associated with the implicit belief that everyday foodstuffs are hearty and nutritious and that more or less modern, fancy preparations are the reverse. Most vegetables that are not seeds or starchy accumulations in tubers and roots are weak in nutritives, while almost any culinary preparation containing sugar or oil is highly nutritious. Aside from meat, eggs, and other animal products, which are, probably, inevitably of relatively high cost, and which need be used only to secure about 25 Grams of animal proteid a day; and bread, which, on the other hand, is, one of the cheapest and most nourishing foods, especially in regard to proteid, it is generally true that the so-called plain, hearty foods are far more expensive, in proportion to nutrients, than are fancy courses, including most desert-dishes.

Some of the economic principles of dietetics are as self-evident as they are popularly misconceived. Thus, no one will dispute the fact that the mass of similar solids varies as the cube of similar diameters. But, suppose it comes to the choice of 2-inch oranges at 20 cents a dozen and 4-inch oranges a 60, how many realize that if the former price is reasonable, the larger ones represent a saving of one dollar?

## Camouflage

### Artificially Induced Skin Diseases

By B. SHERWOOD-DUNN, M. D., Paris, France

Corresponding Member, Société Obstétrique et Gynécologique de Paris; Surgeon (Colonel), Service de Santé Militaire de Paris; Physician to Cochin Hospital, Paris.

**T**HE title selected for this paper may strike the reader as a little bizarre, still, it seems to me to be particularly appropriate to the subject about which I purpose to write. It is not new for the men drafted into military service to induce or to simulate some disease (before or after being called), in hope of securing exemption. Since the beginning of the present war, we have seen multiplied the number of those who have feigned illness of every description, as well as many that have mutilated themselves in order to escape military serv-

ice. It is these fraudulent conditions that will be discussed more in detail.

In the venereal and dermatological clinics, a great majority of these camouflage patients were suffering from picric icterus, petroleum abscess or other provoked eruptions, while many had induced blenorrrhagia. However, it is only just to say that, although the number of those thus trying to avoid doing their duty is large, it is insignificant when compared with the number actually at the front, and they are composed chiefly of the class called the submerged



tenth and who are devoid both of courage and of honor.

In the army itself, there are two opposite causes that give rise to induced disorders. First, in the tranquil sections of the front line, where there is no fighting or excitement, the soldier provokes an eruption so as to escape the deadly monotony of trench-life. Second, in the section that has not been free from fighting night or day for many days, and where the determination of both sides to win causes death to stalk up and down the line without a moment of repose.

Milian<sup>1</sup> relates the case of a lieutenant, twice wounded, twice decorated, many times



Fig. 1. Pustulous Dermatitis produced by Thapsia (Milian).

cited in regimental orders for bravery and dash; No. 1, in his battalion for promotion, who arrived at the base hospital with a provoked eruption. It was at the time when the Huns were battling for the Vaux fort in front of Verdun. The lieutenant's battalion was to take the chief line of defense the next day. "It was almost certain death and I was afraid," he said. And this same man when once in action was a stranger to fear. The apprehension of certain danger is more terrible to support than the danger

itself. Thus, we must take into consideration for this man and for all like him the extenuating circumstances that are active at the moment.

There are numerous kinds of eruptions that can be artificially provoked, the leading ones being as follows, their frequency being in the order of their enumeration: Pustulous dermatitis, bullous or phlyctenular eruptions, eczematiform dermatitis, edemas, false leg-ulcers, false mucous plaques, provoked blenorrrhagia.

#### Pustulous Dermatitis

This is one of the most frequent skin troubles presented and one of the most characteristic. The elementary lesion in this form of provoked dermatitis is a pustule, that is to say, a little dermic elevation of the size of a pinhead and containing pus.

This pustule, if examined attentively, will be found to be reposing upon healthy tissue; and, this characteristic is important. There may be a border of inflammation surrounding it. These pustules are, as a rule, in close juxtaposition and abundant. The next important point to be observed is, that they are in the form of isolated plaques, usually two or three in number and, as a rule, all in the same neighborhood; but, even if located at different spots on the body, there always is the marked characteristic of localization. There is no diffusion nor any sign of a general character significant of constitutional disturbance.

As a rule, these pustules are found upon the face and in the beard; sometimes the ears are invaded, either the pavillon or the cranioauricular angle. Often the thighs are the seat of eruption, usually at the side and to the front, where they are most readily reached by the right hand. For the same reason, often the fore part of the left arm may be involved anywhere from the shoulder to the wrist. One of the most important points in the diagnosis is, to observe that the pustules are all of the same age, that is to say, they all present about the same degree of evolution. If the patient presents himself in the early stage, it will be seen that the pustules all develop together and coordinately; if later, they all are in the same stage of desiccation. This characteristic of the eruption, so useful in point of diagnosis, is easily explained. When the patient applied the irritating substance, he waited to see the effect, without renewing it, doubting in some measure whether it

<sup>1</sup>Milan *Press Médicale*, May 5, 1917.

would be effective: surprised, often, at the number and marked effect of the application in producing a violent eruption, he makes no further application in the same place and presents himself before the examining surgeon.

The difference is marked between this form of eruption and that of the ordinary local infection—the pyodermatic or follicular. With these, each day, there appear one or more new pustules at points distant from each other, as, on the cheek and chin, to the right and to the left, and while one subsides another appears. It is by this manner of appearing that we recognize the etiological causative agent (Fig. 1.)

If a second eruption breaks out at the close or during the treatment of an existing collection, it appears suddenly, usually in the morning and in a new location. However, it is always sudden, simultaneous, circumscribed, not showing a progressive evolution of successive pustules as they appear in spontaneous disease.

Two substances are in vogue for producing these skin eruptions—croton-oil and thapsia. The croton-oil causes a pustulous eruption that is more infiltrated and exhibits a more severe inflammatory base than does thapsia. The soldier soaks a tampon of cloth or cotton with the fluid, and with it rubs the oil into the creases of the face or pavillon of the ear. Thapsia ordinarily being found as a plaster or salve, it does not so readily lend itself to introduction into the cracks and crevices, so that the results of its employment are more noticeable upon the cheek-bones and prominent points of the surface affected.

The diagnosis of a provoked pustulous dermatitis generally is easy, if one remembers these marked characteristics: patches of pustules, clean and sharply localized; situated, as a rule, in regions accessible to the right hand; identical age of the pustules and the appearance of new pustules always sudden, simultaneous, and in distinct patches.

As compared with these, the pyodermatitis, the nontrichophytic syphilis, and the impetigo are easily differentiated.

#### **Bullous or Phlyctenular Eruptions**

The vesicular eruptions are not so frequent, and they are more difficult to account for and more readily recognized. The patient rarely presents himself during the period of vesication; he waits for the blis-

ter to dry and then aggravates the condition by various forms of irritation until an ulcer is formed. When he appears early, he presents a phlyctena, rounded or rectangular in shape, that has the appearance of a burn of the second degree; but, he denies having been burned, as that is difficult to prove, and he says, usually, that it came all of a sudden and that he is ignorant of the cause.

#### **The Bullous Dermatitis**

These cases also are rarely seen in the early stage of vesication. One patient came into the hospital, having about forty well-defined bullæ of the size of a pea or bean, and all confined to one leg. (Fig. 2.) They resembled pemphigus, but, were found upon healthy skin and without any characteristic peripheral inflammatory zones. They could not be true pemphigus, for the reason that one does not find the evidence of this disease confined to a well-localized part of the



Fig. 2. Bullous Dermatitis provoked by a Vesicant (Milian).

body; moreover, fever or any constitutional symptoms were absent, and the vesicles were all of the same age. These signs must arouse the surgeon's suspicion and enquiry; all doubt usually being dissipated by the fact that under an occlusive humid dressing these lesions are rapidly cured in three or four days.

These vesicular eruptions are most commonly caused by the application of cantharides in some form, whereupon the subject irritates the base of the vesicle by renewed application, and thus provokes a morbid ulcerous condition. Here, the diagnosis is more difficult.

The bullous dermatitis of streptococcic origin may be confounded with the provoked eruptions; but, there is present an element that at once marks the difference between the two. In the provoked vesicular

eruption, the center of the vesicle is dome-shaped and the vesicles are distinct and separate. In the streptococcic variety, the center of the affected part is without vesicles and is rough and red, while more or less continuous around the border there appears an elevated ridge, which marks the slow rate of extension of the infection. (Fig. 3.)

#### **Eczematiform Dermatitis**

The face is a favorite site for this form of eruption, with the eyelids frequently in-



Fig. 3. Phlyctenular Dermatitis (Milian).

involved; also the forearms, the hips, and the groins. It may be characterized as edematous erysipeloid dermatitis; the skin is red and edematous, and, when found upon the face, the eyelids often are puffed and swollen, so as almost to close the eyes. It is not infrequent that soldiers thus affected are

sent to the hospital with a diagnosis of erysipelas of the face; but, the absence of a chill or fever, the general condition of the patient and absence of swollen glands (inguinal or submaxillary) at once brings the subject under suspicion. The surface involved bleeds readily, resembling acute eczema. One of these patients was evacuated at Troyon with a diagnosis of erysipelas, and, in another base hospital, at Ambly, as having eczema.

The rapid evolution of the condition is significant. In from two to four days, the eruption has fully declared itself and in from four to six it is completely healed, once the patient is hospitalized. With the disappearance of the eruption, the skin tends at once to return to a normal state; this being quite contrary to the spongy, furfuraceous desquamation, glistening surface, and tender condition that follows eczema. Still, despite all this, the condition is difficult to diagnose. If it is possible to eliminate erysipelas, it is less easy to exclude eczema.

When one is convinced that the condition is the result of some irritating agent, the nature of it can be determined only by the confession of the patient—and here comes an important point. In case of simulation, the patient will persistently deny all knowledge, hiding carefully the agent employed; whereas, if it was accidental and not purposely provoked, it is possible to discover that some lotion or hair-dye or a sublimate solution made use of by the subject as a cosmetic or therapeutic preparation is the causative agent.

This form of eczematous dermatitis is rare, because it is not easily produced, and requires a certain skin susceptibility to produce artificially. The only agent I know of that can produce the condition is automobile-essence (gasolin), which it is not difficult for a soldier to procure. So far I do not know of a single instance where a confession has been secured as to the agent and manner in which the eruption was brought about.

#### **Edemas**

Certain of the simpleminded men tie a band about the lower extremity of the arm at night, tight enough to impede the circulation, but, not so tight as to be unbearable. In the morning, the members presents a white and swollen aspect, quite edematous; but, it is at once recognized by the sharp

mark around the arm or leg where the constriction was made.

#### False Leg Ulcers

Simulations of ulcer are more likely to deceive than any other form of induced disease, for the reason that there is nothing about the lesion to mark it as being self-induced.

The following is an ordinary case. A soldier is brought to the hospital with a bandaged leg and which has been treated at one of the first-line stations. He relates that he fell and skinned his shin or was wounded by a grenade, or had a blind boil, or anything that would leave a wounded surface, and that this had been treated for two or three weeks without being cured. For the time, the unsuspecting surgeon accepts the explanation. He sees one or more rounded ulcers, often profound, varying in size from a 10-cent coin to that of a silver dollar that, from their simple appearance and sharply defined extent, with proper applications and dressings may be expected to heal promptly.

Time passes, the regular dressings are carefully made, but, the sores do not show the slightest tendency toward a cure. After three weeks, they are in practically the same state as at the date of entrance, sometimes somewhat enlarged, some new abrasions may appear, until at last these sores, that have resisted treatment for six weeks, arrest the attention. The doctor no longer can refer their cause to traumatism and he begins to review the various conditions that could give rise to the existing state, thinking, mayhap, of varicose ulcer and syphilis. He redoubles the minutia of his treatment, uses antiseptics in abundance, et cetera. but, the result is the same; weeks and months pass, yet, the patient still is there.

It can be set down, as a rule, that the majority of leg-sores resulting from traumatism, if they do not respond to ordinary hospital treatment and persist for three months, are induced and artificially kept active.

These provoked ulcers are, generally, round and very regular in contour, simulating in a marked degree the gummas of syphilis. They will have a depth of 4 to 5 millimeters, with borders sharp-cut and slightly elevated, the base bright-red and inflamed; there is absence of the filiform amorphous breaking-down of material accompanying infection and absence of infil-

tration; but, from time to time, one finds clinging to the dressing an eczematiform liquid, the result of the irritating agent that has been employed. (Fig. 4.) The suppuration, as a rule, is abundant, thick, and of a greenish-yellow color.

The ulcers are almost always situated at a point easily accessible to the right hand; the inferior third of the right tibia, outer surface of the left leg, and inner surface of the superior third of the right leg. In one case reported, it was the inner surface



Fig. 4. Ulcers produced on the Calf of the Leg (Milian).

of the left arm. They never appear at the classic point for varicose ulcer, just above the malleolus, a point of which the ordinary soldier of the kind with whom we have to deal, is ignorant; but, are higher up, where more readily reached. It is rare that the subject does not cause more than one sore to appear, the rule being two or three, or even four, and, mark! all appearing at the same time.

A characteristic point in the diagnosis is, that these sores are evolved very slowly. In spite of the various applications and rest in bed, besides the perfectly healthy appearance of the surrounding parts, they show not the slightest sign of a varicose condition; they gradually deepen, but, they rarely enlarge.

Sometimes a new point will be started, and then, if the doctor is alert, he will find some very significant signs. The new ulcer starts in one of two forms, either as a vesicle, as the result of the application of some vesicant, or as a discolored gangrenous-looking spot, the result of a caustic application, such as caustic potassa. In the presence of a newly forming spot presenting either of these characteristics, every hypothesis of syphilis, to which may have been attributed the trouble, is nullified; for,

never has an ulcerous gumma started as a vesicle or an eschar.

#### The Differential Diagnosis

The diagnosis of provoked ulcers of this character is extremely difficult, unless one can witness it in its first stages, seeing it start as a vesicle or an eschar.

The differentiation from an ulcerated syphilitic gumma is rendered extremely difficult when the patient gives a history of previous syphilitic manifestations and, because of his acquaintance with the characteristic shape and appearance of the gum-mous syphilide, he causes his provoked ulcer to appear as like that as possible. Milian relates a case sent to him at the base hospital, with a diagnosis of syphilitic gumma, in which the characteristic appearance of the ulcers substantiated the same. This diagnosis was accepted and the patient put under treatment with neosalvarsan in progressive doses, starting with 0.45 Gram and gradually increase amount to 0.9 Gram. However, the ulcer remained the same, the treatment produced no effect. The effectlessness of the medication and the appearance of a new ulcer starting with a vesicle opened the surgeon's eyes, for, never has a syphilide commenced with a vesicle.

The antisyphilitic treatment with arsenic is an excellent diagnostic expedient. The skin- and the mucous lesions of syphilis so readily and rapidly yield to this remedy that the persistence of suspected ulcer, in face of an intensive course of treatment, always is significant.

The Wassermann test is of uncertain value in these cases and often disappointing. With a syphilitic history of the patient, the test will vary, but, it is only rarely that it does not show negative at the close of an arsenical cure. However, the Wassermann test is of decided value when negative in presence of what is supposed to be an ulcerated gumma, for, rarely, if ever, will the test be other than positive when the ulcer is a syphilide.

The provoked ulcer is readily differentiated from the chronic ulcer of ecthyma. The latter starts with a swelling and elevation to a point or apex, which becomes pustulous. When established, it shows a fungoid base of infiltration, with mamelon eminences. The *entire denuded* surface is covered with these vegetations, which are characteristic. Moreover, they become covered with crusts. Neither of these charac-

teristics are present in the induced ulcer. The constant reapplication of the caustic destroys these vegetations and crusts never appear.

Chronic ulcers of spontaneous origin and syphilitic gummas have been met with frequently since the outbreak of the war, and they are the two conditions to be distinguished from induced ulcer.

It hardly is necessary to point out the distinguishing features between a varicose ulcer and one provoked and kept in a state of irritation.

An additional point in the diagnosis is found in the vague hesitant and oftentimes embarrassed statements of the patients, frequently farfetched and but little likely to be true. However, the decisive factor is, the final test of an occlusive dressing, either by means of collodion, which the patient cannot remove, or, if the doctor will apply the dressing himself and note the pleating of the bandage about the foot and exact neat manner in which it is applied and closed, he can usually discover when his dressing has been tampered with. But, an occlusive dressing, regularly applied, will see the ulcer rapidly progress to a cure in a few days.

In very rare cases, a confession can be secured of the means employed to produce the primary lesion and to keep it in a state of irritation. In France, the provocative agent most frequently is a plaster named "vésicatoire Bidet," which is advertised in all the popular journals. Its action is very violent, blistering the skin in a very short time. The erosion thus made is kept in an aggravated state by applications of tobacco-juice or croton-oil.

An explanation of the ulceration can sometimes be found through some happy coincidence. Thus, a soldier with an ulcer on the internal aspect of the left arm came into the service. It was a small wound, rather deep, which had persisted for weeks, and which the man averred had resulted from a shell splinter. It had but one opening, but, the x-ray disclosed no foreign body either in the soft parts or the bone. After a short period of observation, the original wound was suspected to be self-inflicted; so, after a thorough preparation, the arm was covered with an occlusive dressing. In twelve days, the ulcer was completely cicatrized. The patient, knowing that the wound would readily heal when



protected from further interference, applied croton-oil to his left cheek, which produced a pustulous eruption; however, when categorically accused, he confessed, also that the first lesion had been produced in the same manner. He was subject to a form of punishment that most likely would prevent his ever attempting a like ruse in the future.

#### False Mucous Plaques

A soldier presents himself and, in reply to the question as to his trouble, says: "I am syphilitic, I left the hospital two weeks ago, where they gave me injections, and now these sores have come in my mouth." Upon examination, one finds one or two plaques, red, inflamed, looking like fresh wounds. Further, the papulous projections the surrounding leukoplasmia, the peripheral ulceration, the tenacious yellow infiltration-base of the mucous patch of syphilis are absent—conditions that are of the greatest importance in making the differential diagnosis. Concomittant with this, it will be found that the sores are almost always located back in the mouth about two-thirds the distance of the length of a cigarette, on the borders of the palate, on the cheeks, rarely on the tongue, sometimes on the inside of the lips themselves; the reason being that the lighted end of a fresh cigarette is the ordinary means employed to produce these escars. Naturally, they are usually on the left side. The wound rarely is larger than a cigarette end, often a little less, the whole end of the cigarette not having been applied. When found upon the soft palate, they are invariably situated at a point reached by a cigarette held at the end by two fingers.

The frequency of regularity of these signs is remarkably exemplified if, by chance, two soldiers with the same history happen to be in the service and are examined side by side. Left to themselves, these abrasions rapidly heal, showing no tendency to the progressive extension, eccentric or radiating, so characteristic of syphilis.

If, on the contrary, there is an extension of the ulcer, suddenly one sees, in the morning, a violent renewal of inflammatory signs at the base of the sore, possibly at the healthy border (if the lighted cigarette happened to be applied outside), a blister or a whitened, cooked border where part of the burning cigarette overlapped or, if applied in a fresh spot, the signs of a burn are so

evident as to admit of no mistake as to the cause.

#### Induced Blenorrhagia

Induced blenorrhagia had not occurred to me as a means of escaping military service, until one day one of my blenorrhagia-patients confided to me that, at the solicitation of one of his comrades, he permitted him to take pus from his meatus on the point of a knife, who then introduced it into his own healthy meatus. Sure enough, I found the soldier in question with a beginning gonorrhea. Once started, there are various practices by which the subject delays his cure, the most certain being, the daily imbibing of a certain quantity of some alcoholic beverage. When deprived of this aid, they resort to the inordinate use of condiments or drinking vinegar or anything else designed to render the urine acid or irritating.

#### False Symptoms Given by Culprits

The patient having provoked troubles often will complain of symptoms having no relation to or with the trouble induced. A soldier coming with an ulcer the size of a quarter dollar will complain of lancinating pains, that he can not sleep, that he can not walk or stand erect, and, when pressed to locate his pain, often will refer it to the neighboring bone. Besides these discrepancies in history and subjective symptoms, it is possible to establish indubitable proof of the simulation by means of the occlusive dressing and subsequent rapid cure.

Often, also, it is possible to persuade the subject by suggestion, to induce a new wound, somewhat as follows. When examining the patient in the presence of the nurses, aids or visitors or other patients, say to the suspected man: "I recognize perfectly that disease. I have seen it a number of times since the beginning of the war, but, I am surprised to find this ulcer in this location; for, it invariably is 6 inches higher (or lower)—it always has been there in the cases I have observed, and this is very well explained in an article by Dr. So-and-So. It does not heal easily". In general, the next day or day after, there will appear a new lesion at the exact point indicated as the ordinary site of this lesion, and this is instant proof of the self-production of the trouble. Or, if convinced of the fraud, the surgeon can size up his subject and say brutally: "My friend, I am perfectly well

acquainted with this ulcer. I have seen a number of them since the war began, it is a false ulcer, you brought it on yourself. Don't deny it. I will give you the friendly advice to let it be cured in the next week. If you do not, I shall turn you over to the provost marshal". As a rule, this patient will be cured in the regulation period, without further trouble.

To get the patient to confess, is a difficult matter; first, because he is ashamed and once having committed himself to a given cause he is unwilling to change his story, second, he is afraid of the consequences of his misdeed, should he confess the truth. Never can an admission be secured in the presence of a third person, nurse or other patient. It must be alone, away from any possible listener, and then in a perfectly friendly manner. If the physician asks the question and promises, on his honor, not to expose the soldier and to help him back to duty without suspicion, it may be possible to learn the truth, for, many of these men are ashamed and would willingly repair their fault if a way were opened to them.

Another course that has had success is, to call the soldier into the office of the surgeon, alone. He stands before the officer who interrogates him about his name, profession, place of birth, date of birth, name of father, name of mother, their profession and residence, as also of any brothers or sisters. Under this category of questions and the stern visage of the questioner, the culprit begins to show uneasiness, especially when questioned relative to his father and mother. As soon as he shows any signs, sternly charge him with his fault and promise him immunity and your aid if he confesses, when frequently he will give in. It is unnecessary to say that these poor devils get no punishment other than their humiliating sense of shame; however, it is of value to the doctor to learn by what agent and in what manner the trouble was induced, for, this is valuable in aiding him

in detecting the next case.

The question naturally arises as to the responsibility of the surgeon of reporting the case to the military authorities—and it is rather a delicate one. Before a court martial, the doctor can produce no evidence except history of treatment and diagnosis. The patient will solemnly deny all culpability and in nine out of ten cases will be acquitted, leaving the surgeon in the wrong. The result of this spreads through the regiment, to the detriment of the surgeon, and lends encouragement to others to practice similar simulations. Moreover it can not but be repugnant to the doctor to denounce one of his regiment—even when rigorous discipline makes it his duty—when he is convinced that the man is not really bad, but, has succumbed to an impulse resulting from ennui, impatience or fear. It is a situation where the surgeon has a perfect right to exercise his judgment.

However, in order to discourage and prevent any repetition by this patient or the multiplication of his kind, it is wise, when convinced of the self-produced nature of a man's complaint, to call him aside at the moment of his discharge and say quietly to him: "I have not been duped. I am perfectly well satisfied that the eruption with which you were troubled was self-inflicted. I shall send you directly back to your regiment, without the customary leave that follows a period in the hospital, and I warn you not to appear again with this complaint." The soldier will salute, without protest, too abashed and too pleased to get off so easily. In addition, it is well to send a letter to the captain of the soldier's company, marked "Confidential", in which you say: "I wish to bring to your knowledge that the soldier N..... has been in my hospital for a skin affection which I believe was provoked by the man himself. I call your attention to this man, in order that he shall not present himself again under like circumstances."



# Foot Troubles

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**T**HE use of the feet, in military life, is quite different from that in civilian life, because in the former the feet become the real means of locomotion, instead of mere passive support, and the first trouble encountered in this change of occupation is found when the civilian begins to wear military shoes. The foot ailments of his previous occupations seem to become intensified, because the artificial support of his civilian shoes gives away to the broad, roomy, military shoe, built on real anatomical lines, and the civilian feet have to accustom themselves to them and find new places of support, which, naturally,

and indicate their corrections along general lines: (1) Normal feet, (2) flaccid feet, (3) rigid feet, (4) Spastic feet, (5) Pronated and supinated feet.

## The Normal Foot and Its Deviations

The normal foot, when set down upon the floor, will present a broad front view,



Fig. 1. Toes Webbed.

first must become toughened in order to enable them to perform their duties in providing free locomotion.

For the purpose of classification, I will try to describe the following conditions



Fig. 2. Pes Cavus and fifth toe Clawtype.

the toes spreading more or less evenly and in a fan-shape, and capable of plantar flexion. The distal end of the second toe will be found to extend beyond that of the big toe. A perpendicular line extending from the patella should continue over the dorsal surface and end in the interval between the second and third toes. From behind, a perpendicular line extended from the popliteal space should exactly pass the center of the heel where the tendon Achilles is inserted. If the heel turns outward, there is marked pronation and, if inward, supination. The former condition really is worse than the latter, as pronation

invariably is indicative of a tendency to flat feet.

The normal foot really is very flexible, considering its limited movements; that is to say, when the foot has not been abused by ill-fitting shoes. In cases where the foot has been bound by ill-fitting shoes,

each other, the step will be markedly springy. If the correlation between them is impaired, we shall find either a rigid or a flaccid foot.

The flaccid foot will be markedly pronated, but, not so the rigid foot. That pronation sometimes is so marked that the scaphoid bone actually touches the floor. In this case, no arches exist and the plantar surface is completely flattened out. Strange to say, the subject often is able to do hard work despite such abnormal feet.

Other deviations of the normal foot are: Hallux rigidus, hallux valgus, overriding toes, hammer-toes; clubbed, webbed, and claw-toes; ingrowing, inverted, and hyperthrophied nails, and all the different forms of corns, warts, nervovascular growths on the plantar surface, hyperidrosis and bromidrosis, callosities, blisters, cracked toes, dhobie-itch, eczema, and lots more. Some of these conditions are so severe that they exclude a man from military service, only



Fig. 3. Hammertoe.

the flexibility becomes so lessened that not infrequently rigid foot is the result, and sometimes ankylosis of the first metatarsophalangeal joint. If we draw a line from the inner side of the heel to the inner side of the big toe, this will be a perfectly straight line.

The foot presents two arches, namely, the longitudinal arch, which runs from the inner side of the heel to the first metatarsophalangeal joint, with the scaphoid for its apex; and the anterior metatarsal arch, formed by the distal ends of the metatarsal bones, the interval between the second and third metatarsal bones forming the apex.

The posterior arch is formed by the scaphoid, the external, middle, and internal cuneiform bones and the cuboid, with the middle cuneiform for its apex. When these arches are formed in correlation to

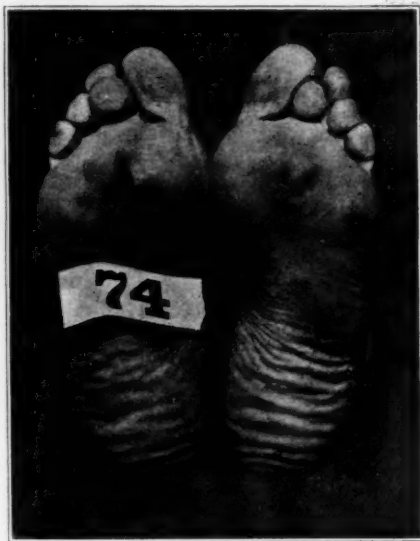


Fig. 4. Hammertoe.

surgical intervention being capable of rebuilding such feet to a semblance of a normal state.

When the great toe overlaps the second and third toes and points toward the outer border of the foot, we have a typical case of hallux valgus, often combined with an exostosis of the heel of the first metatarsal bone, and, with an inflamed bursa, forming

the so-called bunion. Surgical intervention may straighten the toe, but, occasionally ankylosis of the joint has supervened, so that the foot will be useless for military duty. Hallux rigidus, or rigidity of the great toe, interferes with the capacity to march. Hammer-toe, or contraction of a toe (usually the second) often is disabling, and surgical intervention will be necessary. In case of an exceedingly high arch, we find the toes very much contracted, and then we have the so-called claw-toes. Overriding toes, often the result of hammer-toes or from wearing narrow-pointed shoes, can be remedied with mechanical treatments, with the exception of hammer-toe, in which case, surgical intervention is necessary.

#### The Flaccid Foot

The flaccid foot is easily diagnosed, not only by its flabby appearance, particularly at its plantar surface, which looks as if it were withered and usually is sweaty, but,

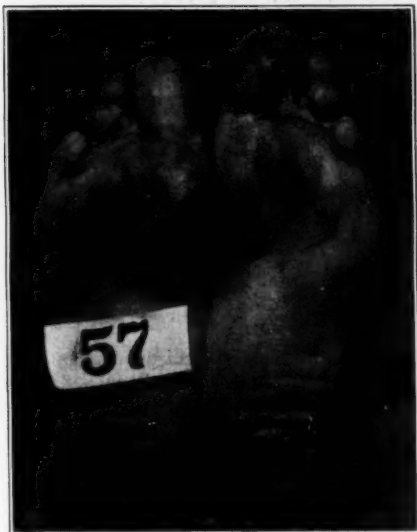


Fig. 5. Underlapping first, fourth and fifth toes.

also by other symptoms, of which the following are the most typical:

Constant pain and pronounced weakness. The pain in the foot starts when the patient attempts to walk, but, this soon wears off and then is felt more in the calf and thighs. Sometimes the sense of pain is experienced in the lower spine, in the form of a gnawing pain. The pain is more severe after resting and cramps and spasms are

prone to follow. The patient complains that even the pressure of a bed sheet is agonizing and prevents sleep. The longitudinal and posterior arches are painful to the touch, while the anterior arches usually are loose. The foot feels distinctly spongy.

Such a foot lacks complete support for the body and, unless lifted by a flexible



Fig. 6. Fallen transverse arch with neurovascular growth under head of third metatarsus.

arch-support, the patient requires professional attendance. Rest is a great help in such cases; however, general toning up of body and mind, massage, and passive manipulation of the legs and feet, besides properly fitted arch-supports, eventually will make such feet useful again.

#### The Rigid Foot

This condition is not always the result of ill-fitting shoes; however, arthritic conditions, adhesions, and periarticular infiltrations will set up conditions of limited mobility, and it is good judgment first to find the cause of the rigid condition. We must look for old sprains, surgical interventions, traumas, contusions, contractions, old fractures, and so forth, and ascertain whether by means of manipulation we can restore mobility. The results of this treatment often are very gratifying if persisted



in. If in doubt, an x-ray picture will disclose the true condition, as sometimes muscular spasms are caused by a tuberculous foot. The best way to restore mobility is, by means of manipulation, and, as this calls for a good knowledge of the anatomy of the foot, it is best performed by a physician, and should not be done by unpracticed hands, as damage might result. It requires from two to four weeks of daily treatment to restore mobility, which often will be completely restored, particularly if the rigidity was owing to fibrous ankylosis, the result of an operation, and provided no exostosis exists.

### The Spastic Foot

In cases of this kind, the origin of the trouble lies in the peroneus longus and brevis and as a rule is not amenable to treatment. Severing of the tendons of the peroneus will be necessary. After the lapse of four weeks after this operation, the feet are to be treated in the same manner as is the rigid type, when recovery is complete.

Another form of rigid feet is the so-called osseous flat foot. As mentioned above, the scaphoid bone practically rests on the ground, the whole foot being pronated and completely flat and hard. Even if the patient is able to perform hard labor despite these feet—often encountered in carpenters—he is not qualified for military service.

### Pronation and Supination

In these two conditions, the heel comes in for close examination in conjunction with that of the longitudinal and anterior arches. In pronating feet, the heel turns outward, and inward in the supinating variety. Much pain is experienced after a long walk or march, and often the calves of the legs manifest contraction of the muscles. Rest, massage, and properly fitted, flexible (*not metal*) arch-supports will relieve this very common condition. It may be necessary to heighten the heel or the inside of the sole of the shoe, at the side opposite the trouble. After this treatment has been properly given for a short period, the muscles will be restored to their relative correct position and all trouble disappear.

### Metatarsalgia

One peculiar trouble of the anterior arch is, metatarsalgia, a severe pain located between the fourth and fifth metatarsals. This often results from the flattening or even only compression of the metatarsophalangeal arch. In the latter case, anterior arch support mostly is all that is necessary to restore the proper balance. Often these affections are the result of short Achilles tendons, and call for surgical intervention. Bursitis and periostitis at the insertion of the tendon at the os calcis are other conditions; they do not, however, necessitate operation, unless there are exostoses. Most conditions of hallux valgus and rigidus, hammer-toes, or Morton toe, and deformities of the little toe require operation to correct their positions.



Fig. 7. Little Toe overlapping Fourth.

While the modern chiropodist is best qualified to remove corns, hard and soft, bunions, warts, and other abnormal growths on the feet and to apply the indicated corrected arch-supports and manipulations of the feet, the surgical interventions are, of course, to be performed by competent orthopedic surgeons. In this way, many men, otherwise rejected for army service, can be made useful, not only for service, but also after their return to civil life.

It is to be hoped that after the war is over, the lesson of what a good shoe consists in will be learned, and there will be less foot trouble to contend with. It is not an exaggeration to attribute eighty percent of foot trouble to faulty footwear.

# After Thirty Years—IX

## Notes and Reflections on Life and Work

By WILLIAM RITTENHOUSE, M. D., Chicago, Illinois

[Continued from December issue, page 911.]

### Calling the Doctor

WHEN I was in active general practice, there was no subject on which I wished more earnestly to enlighten my patients than the need of sending in their calls early in the day. I found that the larger percentage of my calls were sent in so late in the day that the visits had to be made in the evening, when I should have been resting at home and recuperating my strength for the following day. It was no uncommon thing for me to sit around the office all day long, with little to do, and then having to make half a dozen calls after the evening office-hour. Many of my younger readers no doubt will say that they are so glad to get the business that they are willing to accept it at any time of the day. Very true, but, when your work reaches the point where you are bordering on the limit of physical endurance, it becomes a different matter. Here's hoping that you, my young aspiring friend, may reach that point soon. And it is for that time that I am writing.

The nonchalance with which some of these people would assume that I would just as soon work after dark as in the daytime was exasperating. A man, for example, would stroll in during the evening office-hour and say: "Can you come with me over to the house? My wife has not been very well the last few days and I think you had better see her." He would, apparently, be quite unconscious of any hardship in the matter for me. He assumed that I had nothing else to do in the evening but to sacrifice my hours for rest, recreation, and social life for the benefit of people who were too lazy, too shiftless or to indifferent to send in their calls during the proper hours of business.

Of course, I recognize the fact that to some extent this difficulty is unavoidable; but, this is all the more reason for cutting out the avoidable. Sick people are very liable to feel worse and to have a higher temperature toward evening, and many a

patient that at noon did not seem ill enough to need a doctor may have alarming symptoms after sunset. Then another point to be remembered is, that, in many families, especially among the more ignorant foreigners of the laboring class, the wife hardly dares to say that her soul is her own; so, if she were to incur the expense of a doctor's visit without consulting her lord and master, she would be in for a warm time when he came home. So, a good many calls for the doctor are not sent in until the man of the house comes home at night.

It is not easy to overcome this difficulty—impossible to overcome it entirely. When the call comes in, it is well to ask for full information as to the nature of the trouble, how long the patient has been sick, and whether he is suffering acutely or not. If he is, the visit should be made, if possible; the doctor can not afford to disregard real suffering. If the symptoms are not urgent, the doctor may say: "My time this evening is very fully taken up, while, if I were to come, it would be quite late. Now, I can give the patient quicker relief if you will send a messenger to my office at once for some medicine; or else to the drugstore, when I can give the druggist a prescription by telephone. Then I shall call in the morning."

### Do Not Lose Your Temper

The temptation is very strong to express one's irritation; this, though, is not good policy, if one wishes to retain the patronage of the family. It is important to appear (and to be) anxious to relieve suffering as quickly as possible. Whether the visit is made that evening or the next morning, the doctor should not miss the opportunity of doing a little "educating" by remarking: "I can give you better and prompter service if you will send in your calls early in the day whenever possible. So many people wait till evening to send that my evenings are overcrowded, while during the day I have plenty of spare time. It is not so much night-work that wears a doctor soldier's physical, spiritual, and economic

out as it is the evening-work. The night-work comes only occasionally, the evening-work, however, is a daily affair. Very often I have to travel over the same ground in the evening that I have already been over in the day."

People very likely will reply: "But, what, if the patient was taken sick only in the evening?" The answer should be: "In that case, any doctor will be glad to respond promptly. That would be no hardship, because those cases are few. The majority of evening-calls are for patients that have been sick all day and just as well could have sent earlier."

Going over the same ground two or three times in one day, wastes a great deal of time. Especially when patients live at a distance does this difficulty become serious. To make a call ten or more miles away and then, after returning home, to get a call from the same neighborhood to visit some patient too negligent to send in the order at a reasonable hour is highly exasperating. I have often said to such people: "I have just been in your locality. I am sorry that I did not know earlier that you wanted me. If I make a second trip over there today it will compel me to neglect a number of patients nearer home. I am afraid I can not come before tomorrow."

Another trial of patience for medical men is, the person who sends an urgent call when the matter is not urgent at all. Doctors, as a class, are fairly unselfish and ready to sacrifice their hours for rest, meals, and social enjoyment in any case that is really urgent, such as a serious accident or a patient in great suffering. In my early practice, I soon learned that there were people who would send a "hurry call" for the doctor to come "right away", and then, when, perhaps, I had left an unfinished meal or a much needed nap, I would find some quite ordinary case of no urgency whatever; and, before long, I made it a point to ask for particulars. I would say, and I instructed my family to say in all cases of "urgent" messages: "Give me some idea as to what is the matter, so that the doctor may come prepared."

There was one druggist in particular who was sinner-in-chief in this respect. He would send every message as a hurry call, whether it had come to him as such or not. I said to him, as I said to many patients: "If you send all calls as urgent, the result will be that the doctor, after being fooled

a few times, will become indifferent, and sometime, when there is a bad accident, he will take his own time about coming, and the result may be serious. It will be like the old fable of the shepherd-boy who cried 'wolf' so often for fun that when the wolf really did come nobody paid any attention to him."

A doctor that has a large practice can not make every call at once, and he can give better service if his patients will co-operate with him by sending a little correct information with the call.

Closely allied to this nuisance is the man who wants you to leave during your office-hours, even though there is nothing especially urgent about his case. He comes into the office when, perhaps, there may be no patients waiting. He says: "Can you come to my house at once?" I answer, "As soon as the office-hour is over I shall be there." "But", he urges, "there are no patients here. Why can't you come now?" I reply, "It is true there are no patients here now; but, there may be the next minute. Some of my patients come long distances, some even from out of town, and it is not right to disappoint them." He is still unsatisfied. I say to him, "Let us turn the thing around. Suppose you came five miles or forty miles to see a doctor at his office-hour and found him out making calls. Would you not feel that he was treating his office-patients unfairly?" Of course, in great emergencies even office-patients must come second.

#### The Man Who Wants to Help

There is one kind of patient who often is a good deal of a nuisance; however, we can afford to regard him with an amused tolerance, because he means so well and really thinks he is doing you a favor. I refer to the man who brings the doctor a new remedy, a "sure cure", and wants him to try it. These people imagine that the practice of medicine is simply a process of trying things that are "good for" this or that disease—a sort of glorified collection of old-women's nostrums. Well, we must admit that there still are some physicians whose conception of the healing art is about on that level. Modern scientific medicine, though, is quite another matter.

It would be amusing, if it were not so disgusting, to see some novelists set forth their ideas of the practice of medicine. There is one American woman story-writer

in particular whose descriptions of silvan and rural life have a certain charm, but, when she dips into medical matters, she furnishes the profession with material for hilarity or nausea, according to the reader's temperament. She pictures a boy of wonderful genius living in the forests of northern Michigan, cultivating medicinal plants, finding a "sure cure" for pneumonia, and presenting it to the American Medical Association. Her description of that august body in session in an eastern city, sitting at the feet of this youthful prodigy as the Jews of old sat at the feet of Gamaliel, leaves one in doubt as to whether to regard it as unconscious humor or as an emetic. The A. M. A. has much to answer for, but, not that, thank heaven, not that!

There is in this city of Chicago a business-man, who in all the ordinary affairs of life is exceptionally shrewd and intelligent. But, he has one hobby about which he is incorrigible and about which his common-sense seems to desert him. Every now and then he brings me some nostrum that he has "discovered", and wants me to try it in my practice; and he is a little puzzled over the fact that I do not enthuse over the matter in the way he does. In a financial transaction, no one would be quicker than he to detect the "goldbrick", if it contained one. Yet, in regard to the health of himself and his family, he seems ready to swallow any humbug that comes along. He is simply a "sucker" so far as medicine is concerned. This phenomenon is a perpetual puzzle to me. I have seen many examples of it.

This man's latest find came along some two years ago. He said to me one day:

"I have something new that I want your opinion on. It was discovered by a friend of mine, a druggist on the Pacific Coast. He says that there never has been known to chemists any way of dissolving sulphur. He has worked on it for fifteen years and has at last found a way. He makes no secret of the fact that it is simply dissolved sulphur, only the method of dissolving it he is keeping secret for the present. You see that it is not a patent medicine, but, I have never found anything that does me so much good as this." (There is nothing the matter with him except that he eats too much.) "When I don't feel well, I put a few drops of it into a glassful of water, drink it, and in a little while I feel fine." He insisted upon bringing me a sample. Examination proved it to be simply a weak solution of sulphurous acid in water with a little coloring matter; in other words, it was a repetition of a notorious "microbe-killer" widely advertised some twenty or more years ago. Such things make one wonder whether the laity will ever develop an intelligent view of the practice of medicine.

And, yet, as I lay down my pen, the thought comes to me that, while we are making merry over the financier who does fool things in the medical line, what is the financier thinking of doctors that buy stock in gold-mines that exist only on paper, or land in Florida that they have never seen and which can be seen only by looking over the side of a boat, or finance-schemes for breeding stingless bees or making candy out of cactus?

[To be continued.]

2220 Warren Ave.

## The Reeducation of the Blinded Soldier

By EMMA KASPAREK ENGLAND, B. S., Prairie du Chien, Wisconsin

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WHEN Canada decided to send half a million men to the defense of her mother country, the national mind generously shouldered the responsibility of caring for those who gave their all for the national welfare.<sup>35</sup> The government endowed the Military Hospitals Commission (later changed to the Invalided Soldiers Commis-

sion) with authority to work out a plan for the reeducation of the disabled members of the Canadian expeditionary force upon their return to Canada.<sup>36</sup> The president of the Commission is J. A. Toughed and the secretary is F. H. Scammell, Ottawa, Ontario. The aim of the organization is, to do everything that is best for the returned

35. Bulletin: Reconstruction, p. 3, March, 1918.

36. Sessional Papers, p. 45, No. 35a, 1915.

soldier's physical, spiritual and economic wellbeing.<sup>37</sup> Public effort assists the government to insure the returned heroes a bright outlook upon life and a training for self-support.<sup>38</sup> After proper medical attention, the advice of a vocational counselor is given. He is a man possessing broad knowledge of various industries and the training necessary to follow them. Of course, the question of supply and demand must enter, so that men will not be trained in occupations that produce too many uncalled-for articles. Then, too, the man's own desires must be taken into consideration.

The Military Hospitals Commission has arrived at a scheme providing for the re-education of discharged soldiers. In nearly every province of Canada, there is: (1) a provincial disabled-soldiers training board, which determines who are fit subjects for vocational reeducation; (2) a body for each province that has general advisory powers for the coordination of local efforts; (3) vocational officers, who are in immediate charge of the work in each locality under the direction of the vocational secretary of the commission, with headquarters at Ottawa.<sup>39</sup> The Canadian government has learned that even in countries where perfect administrative detail is a passion confusion is bound to arise if the care of the maimed is divided among various departments of state, because there then is overlapping and waste of effort and of expenditure, resulting in disadvantage of the patients.

At first, the members of the commission thought that what the returned soldiers most needed was, a convalescent home where rest and refreshment might be secured. Scores of beautiful houses were offered to the commission, luxuries were supplied to the returned men, discipline was relaxed, and other kindly attractions were offered that might have proved beneficial to men who remain in hospitals for a short time before resuming an ordinary occupation. However, this treatment was found detrimental to best interests of men that must remain for long periods. These homes should not have been thought of as places for relaxation, but as places of rehabilitation; and now they are being changed from convalescent homes to mili-

tary hospitals, where, after physical restoration, the evil effects of idleness are warded off by profitable occupation.

The soldiers take great interest in their training, because they are told that their earning-power will not interfere with the amount of their pensions. Representatives of the Military Hospitals Commission and of the Canadian Patriotic Fund meet discharged men upon their arrival at a Canadian port, and, again, local committee-men meet the trained soldiers when they arrive home. These services often are performed at inconvenient hours, but, willingness on the part of people who volunteer the kindness has never been found wanting.<sup>40</sup>

The Canadians are thankful, because the number of blinded that have returned is less than was expected. Only twenty Canadian soldiers were blinded in the first three years of the war, nearly all of whom remained at St. Dunstan's Hostel, London, for training. Of the nine that returned to Canada, one came to the Halifax School for the Blind for instruction. A second has entered the insurance business; a third, who had previously completed a course in electric engineering, is employed with the Hydroelectric Commission, Hamilton. A fourth is receiving instruction at Montreal, a fifth is learning to be a stenographer and dictaphone-operator at a convalescent hospital in Winnipeg. Four more do not care to accept any assistance from the Military Hospitals Commission. One has nearly completed his training as a masseur in St. Dunstan's and will be employed at Toronto.<sup>41</sup>

Private Smith attended the blind-school at Montreal. Every day a visitor sent by the Canadian Patriotic Fund read to him. Mr. Smith became tired of the work he had to do at the school and returned to his homestead, but, he had learned one thing: that his fight was half won, because he had emerged from out of the spiritual darkness. Upon leaving, he was presented with a braille typewriter, which he had learned to use, a blindman's watch, and an outfit of clothing. Every week he receives a letter from a girl who has learned braille in order that she may write to the blind. Private Smith divides his work into three parts: he peddles aluminum ware and books on farming, he shovels grain in the thresh-

37. American Journal of Care for Cripples, 4: 17.

38. Sessional Papers, p. 45, No. 35a, 1915.

39. Military Hospital Commission, p. 50, May, 1917. 39.

40. Special Bulletin of the Military Hospital Commission, p. 6-8, 1916.

41. Special Bulletin of the Military Hospital Commission, p. 38, 1916.



ing season, and, when the country-fair time comes, he offers soft drinks for sale. Besides, he does the typewriting at the local hotel. What counts for more, he writes letters of encouragement to other blinded soldiers, telling them that the first duty of a blinded man is, to be cheerful.<sup>42</sup>

#### Aid for the Blinded Heroes of Belgium and Italy

Although the cruel hand of Germany has nearly laid prostrate the little country of Belgium, the world offers it tribute, because it has the vitality to establish reeducation at schools outside of its borders. In Belgium, it was necessary to act quickly. The minister of war realized the importance of the situation and, so, appointed an efficient man, M. de Paeuw, to establish a fitting institution for the training of the disabled. In four months, the institution was ready for service. It is beautifully situated at Port-Ville, France, on the left bank of the Seine River, overlooking islands abounding in trees, carefully cultivated farm plots, and pleasantly situated villages.

Today, "a buzzing hive of soldiers" has broken the stillness of the wild wooded fields. Mayor Harcour is supervisor of the establishment, and, with the aid of a devoted competent staff, the disabled heroes are learning to become useful citizens. Workshops are organized in conjunction with the school-work, and all the articles made are sold. The doctor's advice, the individual's inclination, and the economic problem of supply and demand are the determining factors in the selection of a trade.

The maimed arrive in groups after physical rehabilitation at a hospital is completed;<sup>43</sup> but, the blinded are encouraged to attend the Phare de France, which is wholly devoted to those that have lost their sight.<sup>44</sup> Miss Winifred Holt, who established the Phare de France, welcomes the Belgian and Italian soldier, as well as the French. In France, a beautiful scene of the winding Seine, a field rich in thickets of oak and birch, a place of musical notes of song of wild bird was chosen for a site for the institution of vocational reeducation of the Belgians; in Italy, a like magic transformed the palace of the Bourbon kings of Naples into a home for the dis-

abled Italians. The once luxurious chambers of the palace have become sunny school-rooms for brave soldiers.<sup>45</sup> The rich Villa Merafiore in Rome, an American academy, also was equipped for the reeducation of the disabled Italian.

As in the other allied countries, the wounded and rehabilitated soldiers of Italy were suspicious when they were asked to learn a trade. They feared that the government pension would be withdrawn if they became able to earn a living. So, they sat in the royal garden and enjoyed the sunshine and flowers and the fickle lights on the Bay of Naples, and compared a life of future idleness with what it might have been if war had not been declared. Their pathetic dreams of a life of future emptiness was interrupted by the instruction that their pensions were but a supplement to their earning wages. Then they went to work with the unaffected joy of schoolboys.

During the absence of the King at the front, Queen Elena gives much of her time and strength in seeing to it that recreation is given to the men that came back. She entertains them in the Royal palace.<sup>46</sup> The Italian soldiers, the same as the Belgian, when they have been so unfortunate as to lose the sense of sight, are requested to take the special training for the blind in the schools established in France. An international school for the blind of the allied armies will soon be in operation in Genoa, Italy.<sup>47</sup>

#### Uncle Sam's Plans for Blind Soldiers

Unlike France and England, both of which have had to depend upon voluntary contributions, the United States government has said that citizens who are blinded while fighting for their country shall be rehabilitated, reeducated, and taken care of at the expense and under the direction of the government. Representatives of the Surgeon-General's office thought it best to take the advice of representative workers for the civil blind in working out a system of training. Questionnaires were sent to workers for the blind throughout the country, asking for suggestions. The Committee on Ophthalmology of the Council of National Defense met at Washington, October 12, 1917, and remained in session for two days. They offered the following sug-

42. Survey: "A Canadian City in Wartime," 38, April 7, 1917.

43. American Journal of Care for Cripples, 4: 179.

44. Survey, p. 43, Oct. 4, 1917.

45. Boston Globe, Mar. 11, 1917.

46. Boston Globe, July 7, 1917.

47. Boston Globe, Mar. 11, 1917.

48. New York Times, Mar. 17, 1918.

## LEADING ARTICLES

gestions to the Surgeon-General of the Army:

An executive officer, with one or more assistants and a secretary, should be sent to France, with authority to determine the number of teachers required and their qualifications. They advised that at least one blinded teacher should be included in the staff, because his example would be an inspiration. The executive officer should have his office at a special hospital center.<sup>49</sup> The council arranged for efficient supervision and encouragement, as also for the services of a doctor from the time the soldier received the first dressing.<sup>50</sup> Blinded soldiers should not be in a ward by themselves, but, should be in the company of other patients, so that they may secure the assistance of their comrades and that their interests may be broadened. Physical and mental occupation should be provided for the convalescent, to create a spirit of hopefulness and to avoid retardation. These activities should continue on shipboard on the homeward journey. Men otherwise wounded, should be coached to give the blinded the assistance and encouragement.

After the soldiers arrive at the port of entry in the United States, provision should be made for their entertainment in the hospital at the port until they are dispatched to the station for reeducation of blinded soldiers. The station shall be near the eastern seaboard and of a size to accommodate not more than 200 men. The director of each station shall appoint teachers that are efficient. Suitable instruction shall be given in reading and writing the approved uniform embossed system, writing with pencil and typewriter, transcribing from the dictaphone, and telephone switchboard operating. Practical trades, such as broom-making, basket-making, mattress-making, rug- and carpet-weaving, farm work, mat-making, carpentry and joinery, net-making and coarse knitting, and winding of coils for armatures, will be taught. The men will be trained to help themselves dress, shave, handle knife, fork and spoon at the table, walk with a cane, write with a pencil, and sew on buttons.<sup>51</sup>

Professional training will be given to those that show indications of being successful. If a college training is asked for, it shall be given, especially if a course was

begun before the victim's entry into the war. Readers will be provided by the staff in charge.<sup>52</sup>

Instruction in physical training will include medicine-ball, pushball, punching-bag, relay races, gymnastics, field sports, running, climbing, swimming, diving, skating, bowling, tramping, boating, et cetera. Such table-games as cards, dominoes, checkers, chess, parchesi, backgammon, fox and geese, solitaire, and marbles will be taught. Recreation shall be provided in the form of dancing, singing, cross-country walking, roller-skating, attendance at the theaters, musical and various other forms of entertainment.

The reading to be embossed will be classified as follows:

Best short modern fiction: stories, detective tales, et cetera, 50 percent.

History and biography, including sketches of blind men, 10 percent.

Adventures and travel, 10 percent.

Popular science and European war, 10 percent.

Social science and government, 5 percent.

Humor, 5 percent.

Poetry and general literature, 5 percent.

Alphabet cards, practice sheet, 7X primer of the braille, 5 percent.

The time required to reestablish the blind soldier in living condition and independence varies from three months to a year.<sup>53</sup> During the period of training, the pupils are under military control. This has its advantages, because the routine of military authority is familiar and will drive away depression; it insures the accomplishment of some course in training; it prevents loving relatives from persuading the soldier not to return to school after his vacation, and it makes certain the returning of a useful man to civil life.<sup>54</sup>

At the director's recommendation, the soldier is discharged and employment is procured. Whenever this may be possible, it is deemed wise to return a man to his former occupation or to one closely allied to it. Another good plan is, to teach a member of the family to help to keep the blinded man occupied. There should be civil-service regulations for opening new occupations for the employment of the blind. The followup work should be systematic and dependable. Individual volunteer work should only supplement the work

49. Outlook for the Blind, xl:51.

50. Survey, p. 352, Dec. 22, 1917.

51. Outlook for the Blind, x:50.

52. Survey, p. 352, Dec. 22, 1917.

53. Outlook for the Blind, x:50.

54. See reference No. 52.

of the employment agent, and it should not be overestimated.

In summary, the pyramid outline following suggests the plan accepted by the United States Government.<sup>55</sup>

From the data in this article, the following conclusions may be given in the form of a summary:

#### Conclusions

1. A new department for the soldiers' civil reestablishment has been added to the governments of the warring nations. Military authorities, assisted by philanthropic organizations, take the disabled soldiers and give them physical, spiritual, and industrial training, so that they may become useful citizens.

2. A scale of pay and a pension is allowed to the soldiers while in training, thus providing for the support of dependents.

3. Every one of the allied countries, with the exception of Belgium, has a special institution for the training of the war-blinded. Training begins at the base hospitals and is continued until one or other of the following trades are mastered at a special school for the blind: broom-making, mattress-making, basket-making, rug- and carpet-weaving, telephone-operating, various forms of farm work, mat-making, winding of coils for armatures, piano-tuning, salesmanship, massage, stenography, carpentry, and knitting.

4. All of the blinded learn braille and typewriting.

5. Amusements, in the form of gymnasium exercises, table-games, and recreation out of doors, are provided.

6. The men in training are under military control until they are prepared to support themselves.

7. All countries are providing followup work by an after-care committee, who visit them regularly after they have gone into business for themselves.

This new work in education is in an experimental stage. Everything that human mind can conceive is being done by those to whom the work of supervision is entrusted, so that the blinded war-victims will take courage to face the future, with the feeling that much happiness still is in store for them.

#### Supplementary

Shortly after the completion of this paper, the annual meeting of the American

Medical Association was held in Chicago. A special session was set apart for the discussion of methods as to the best way of carrying out plans for the reconstruction and rehabilitation of our disabled soldiers, sailors, and marines. Addresses were delivered by many celebrated medical men from Europe and by our own equally celebrated medical men. As this is in line with the thoughts expressed in the foregoing article, selections are made from these addresses, for the benefit of the readers of the original paper.

The chairman, Colonel Billings, in speaking of doing something for our disabled men, said: "We want to make them well again; we want to cure them, if we can; and we want to restore them to civil life, that they may take their places in economic life again as capable of earning a living wage or salary as they were before; and, also, to enjoy life as we want them to enjoy it, because they certainly have earned it."

The Surgeon-General of the Army said: "By examining the statistics of the Canadian army, we get a pretty good idea of what we are going to have to do. They have sent over some 350,000 men; they have been at war now about four years. Of the men sent across, they brought back about 10 percent for this reconstruction work."

Recently, Congress has enacted a law that places the disabled soldier within the authority and jurisdiction of the federal board for vocational education.

In speaking of the war-blinded, Colonel Bordley, on the staff of the Surgeon-General, said:

"The attitude of the blind is not, happiness, but, rather, an attitude of resignation. Strange as it may seem, every great advance in the treatment of the blind has followed in the wake of war, and this war has proved no exception. The surgeon-generals of our Army and Navy have combined forces and together they are going to educate the soldiers, sailors and marines. This education is to be given them in a military training school for the blind, which is to be located on a magnificent estate in Baltimore. This school is to be conducted by the best teachers of the blind in this country. It is to have every appliance that is known and is available in the development of the powers of the blind. When they complete their courses in that

55. See reference No. 53.

56. Outlook for the Blind, x:51.

57. Outlook for the Blind, x:51.

school, trial employment will be given them.

"We divide the blind into five classes: those who can work at home; those who can work in blind-shops; those who can enter industry; those who can go into agriculture; and the professional classes. We are not going to let any of these blind men get away from us until we know that they are ready to go to work.

"We recognize that the blind man has three serious difficulties to overcome before he can make his own living. The first difficulty is, his timidity; the second is, the misplaced sympathy of his family and friends; and the third is, the reluctance on the part of industry to employ him. To help him to overcome his own handicap, we are going to educate him. To help the family to realize the man's ambitions, the man's troubles, to see the necessity for their moral support in his work, we are going to take

one member of the man's family to Baltimore and educate her side by side in our school with the man himself. We purpose to keep that person in Baltimore in the house that will be conducted by the Red-Cross institute, without cost to the family. To overcome the difficulty of the reluctance of industry to employ the blind, we purpose to help the blind man to demonstrate to industry that he can take his place and do his part."

One of the speakers, Colonel Bruce of the English army, in closing his address said:

Let us all hope that such happiness is in store for our blinded heroes.

There is a light about to gleam,

There is a font about to stream,

There is a midnight darkness, changing into day;

Men of thought and men of action clear the way.

## A Study of Influenza and Epidemic Pneumonitis

By HYMAN I. GOLDSTEIN, M. D., Camden, New Jersey

[Continued from December issue page 908.]

### Prophylaxis

THE disease is highly contagious, as much so as measles, and probably is most readily transmitted by the nasal, pharyngeal and bronchial discharges, especially in coughing, spitting and sneezing and probably also by blankets, handkerchiefs, clothing, et cetera, used by careless patients. Early recognition of the first cases and prompt and complete isolation are necessary. Every patient should be strictly confined to bed until symptoms have completely abated. Isolation should be maintained throughout convalescence. Health authorities prohibited public gatherings. Moving-picture houses, churches, ice-cream and beer saloons were closed, as well as the schools. Emergency hospitals were opened in many cities.

Those exposed to infection or in danger of being exposed, and all members of families where a case of this epidemic influenza is already existing, should be immunized with Combined Influenza Vaccine in fairly large doses. There is now abso-

lutely no doubt as to the great prophylactic value of properly and freshly prepared combined influenza vaccine, containing *B. influenzae*, *micrococcus catarrhalis*, *pneumococci*, *streptococci* and *staphylococci* and probably also *B. Friedlander*. Many hundreds of employees of the Bell Telephone Company of Pennsylvania were immunized with the mixed vaccine and most encouraging were the results. From all over the country, satisfactory results were obtained from the prophylactic use of these vaccines. Very few of those persons inoculated early developed the disease. Even the few who were immunized and then taken down with the disease, did not have a severe attack and were quite free of complications. In my own experience, only two or three developed slight symptoms of the disease and promptly recovered, out of a fairly large number that were inoculated for prophylactic purposes.

Dr. Solomon Solis Cohen believes that the mixed bacterins (vaccines) are as valuable and efficient in the treatment and prophylaxis of influenza and its complica-

tions as mercury is in syphilis and quinine in malaria.

Dr. Wm. E. Robertson has used the mixed vaccines in hundreds of cases, even intravenously, with wonderful results, in the treatment of the disease and its complications.

Thousands of soldiers have been so inoculated in several of the army camps. Thousands of people were successfully inoculated and saved from serious illness in New York City, Chicago, Philadelphia and other places. Among 670 cases in which prophylactic immunization was done by Dr. Napoleon Boston, no cases of the disease occurred.

Prophylactic immunization has been practically demonstrated in many of the large industrial plants in the Philadelphia vicinity which territory was early affected by the epidemic influenza.

Some of the employes of the Philadelphia Electric Company who had contracted influenza before the course of prophylactic immunization was instituted, were treated with the influenza vaccine, and not one of these died! The initial dose given to patients suffering from influenza was 1 mil in cases which were not serious and 1.5 mil or more in desperate cases. The injections were continued (if necessary) every 24 hours with the same dosage until a favorable prognosis was noted.

These favorable results prompted other large industrial plants and public institutions including the health boards to employ immediate prophylaxis toward preventing the spread of this influenza epidemic. Notable among these institutions are, the U. S. Steel Corporation, American Steel and Wire Company, of Ohio, Bell Telephone Company, of Pittsburgh, Pa., and others.

Eyre and Lowe, in *The Lancet*, (Oct. 12, 1918, p. 485-7) report upon vaccines used in 1000 cases for prophylactic purposes. They conclude that (1) There may be no reaction. (2) There may be slight reaction—this is the most likely result and will probably occur during the first 24 hours after inoculation and, apart from a possible tenderness at site of injection, may produce a slight malaise, and stiffness and headache. (3) There may be a severe reaction.

In my experience, reaction was of no consequence and, if it occurred, was very

slight. The tenderness and stiffness of arm injected passed off in 24 to 48 hours.

The immunity probably lasts from two to six or eight months.

The employment of properly made gauze masks over the face to prevent the transfer of infection to others and to yourself has proved a valuable prophylactic measure. The importance and value of such face masks has been noted and emphasized by George H. Weaver (Chicago), J. A. Capps, Haller and Colwell, A. B. Lyon and B. C. Doust, Hamilton (1905), S. J. Meltzer (1916). Many of the masks used were nothing more than mere camouflage, being made of one, two, or three layers of thin gauze and, hence, absolutely worthless. Masks should be made of good size, of six or seven layers of gauze, or else several layers of gauze with some sterile absorbent cotton between them in sandwich-like fashion (this latter method was used by me). It is advisable to use a spray of 3 to 5 percent dichloramine-T in chlorcosane on the face masks—this is unirritating, does not "wet" or soak the gauze, and is very efficient; repeated spraying should be resorted to. The mask should have an appropriate or suitable mark on the outer side, so that, if the mask is removed for a few minutes, it will always be replaced with the same side out. As these masks are cheap, it would be advisable to change them often, or to use a new one, when the mask worn is temporarily taken off. Doust and Lyon (*Jour. A. M. A.*, Oct. 12, 1918, pp. 1217-1219) conclude that—

- 1, During ordinary or loud speech, infected material from the mouth rarely is projected to a distance of four feet, and ten feet; which constitutes the danger zone about a coughing patient.

- 2, During coughing, infected material from the mouth may be projected at least ten feet. The danger zone about a coughing patient has, then, a minimum radius of ten feet.

- 3, Masks of coarse or medium gauze of from two to ten layers do not prevent the projection of infected material from the mouth during coughing. Such masks are worthless, therefore, in preventing the dissemination of respiratory infection.

- 4, A three-layer buttercloth mask is efficient in preventing the projection of infectious material from the mouth during speaking or coughing. It is a suitable mask, therefore, to be worn in connection with respiratory diseases.

The use of mild antiseptic washes for nose and throat is recommended. I used



Liq. Thymolis Comp., (diluted with several parts of warm water), or Liq. Antisepticus Alkalinus Compositus.

Dichloramine-T in chlorococaine, in 3 percent solution, or chlorazene solution, or acroflavine 1:1000 may be used in sprays of nose and throat.

#### The Treatment of Influenza

The treatment is, principally that 1, by mixed or combined influenza vaccine or combined M. catarrhalis vaccine or by serum from convalescent patients; 2, hygienic and dietetic measures; 3, symptomatic and supportive remedies.

The alkaline treatment, the acute-nephritis treatment, the anticipatory treatment, the expectant watchful treatment, all have their supporters and all have produced good results. Of course, the ideal method would consist of immunizing the patient's family with vaccine or, if it were possible, with an efficient toxin-antitoxin, as in diphtheria, and the use of specific antiserum or antitoxins. Unfortunately, we have no such efficient agents as yet, as we have not been informed by the numerous research men and investigators as to the exact cause of this most contagious and infectious disease—probably the most contagious disease of all infections, when occurring in pandemics of this nature.

In view of the fact, that we have no antitoxin, I started out to use rather large doses of freshly made combined influenza vaccine and combined M. catarrhalis vaccine. The results obtained were most satisfactory and encouraging. Indeed, in some of the cases, the rapid improvement was nothing short of remarkable. There were no ill effects whatsoever and, even when used in young children, temperatures of 105° and 106° F. came down 4, 5 and 6 degrees in 24 hours. I am convinced that such drops in temperature and so remarkably rapid an improvement in many of the cases would certainly not have occurred, had I not used the vaccines promptly and repeatedly where necessary.

It is to be regretted that this vaccine treatment was not given to more patients and their families, prophylactically as well as therapeutically, during the early part of the epidemic. Many lives might have been saved, much illness prevented, and serious complications avoided.

There is no scientific reason for the use of diphtheria antitoxin in this disease and

as a therapeutic measure it is absolutely worthless except, of course, where diphtheria is complicated with an attack of influenza.

The principle of using the serum of patients who have recovered from influenzal pneumonia is rational, and its use has been followed with satisfactory results.

McGuire and Redden have reported the results of the use of such *convalescent human serum* in the *Journal of the American Medical Association* (Oct. 19, 1918, p. 1311). They state that all of the deaths in the Naval Hospital (Chelsea, Mass.) were due to the pneumonia complication and none to the influenza as such. The mortality varied from 30 to 60 percent.

Flexner and Lewis (*Jour. A. M. A.*, May 28, 1910) and Amoss and Chesney (*Jour. Exper. Med.*, 1917, xxv. 581) reported valuable and encouraging evidence in the use of convalescent serum from poliomyelitis patients in the treatment of anterior poliomyelitis and it was, therefore, thought advisable by Redden to use the serum of convalescent influenza-pneumonia patients as a curative measure, because of probable antibody content. Out of about 40 patients thus treated, only one died. They used 75 to 125 mils of the serum intravenously. The convalescent serum was obtained within a week after the temperature had dropped to normal. The majority of the patients received a total of about 300 mils. The improvement was noticed in the first 24 hours after its use. Of course, Wassermann tests and compatibility tests of the donors' sera with the recipients' corpuscles were made as soon as new cases appeared in the ward. Further study as to the potency of convalescent serum is advisable.

Intravenous injections of hexamethylenamine were used by Loeper and Grosdier in doses of 1.5 to 2 Gm. (*Bull. Soc. Méd. des Hôp. Paris*, May 31, 1918, xiii., No. 19.) It is harmless, according to these men, and, of 15 pneumonia patients, all were improved and cured; in 5 cases the disease was aborted, defervescence occurring the following day. It would seem to me, however, that the frequent presence of albumin and casts in the urine of these influenza-pneumonia patients, would surely contraindicate the free use of urotropin. I did use, at the beginning of the attack, a capsule called by me "Urotropin Comp.

Capsules" and consisting of phenacetin grs.  $1\frac{1}{2}$ ; acetylsalicylic acid, grs. 3, and urotropin grs. 3—one being taken every two hours. This relieved the pain and aching. Where the kidneys were affected or where the patients were not seen early in the attack, the urotropin was not used.

Another favorite prescription I used was, caffeine citrate, grs. 2; cinchonidine sulphate; grs. 2 to 3; and acetylsalicylic acid, grs. 3 to 5.

I did not use quinine sulphate, quinine and urea hydrochloride, nor Dover's powder, nor a great many other drugs employed by many physicians. I used small doses only, of aspirin, phenacetin, urotropin, and other pain alleviating preparations—these were stopped at the end of 36 to 48 hours, or sooner if the patient felt relieved. For the cough, I found nothing better than codeine, in doses of gr.  $\frac{1}{8}$  to  $\frac{1}{4}$ , and citrate of sodium or citrate of potassium in doses of grs. 5 to 10, every two hours. *Mistura glycyrrhizae composita* was used occasionally, however, the tartar emetic contained in this preparation is depressant and this must not be forgotten, especially in our weak, enfeebled sweating patients. My patients received tincture of nux vomica in fairly large doses or strychnine sulphate in doses of gr.  $1/20$  to  $1/30$ , frequently repeated. Digitalis did not seem to act so well, and failed utterly in some of my urgent, seriously sick cases. *Digipuratum* was the digitalis preparation mostly used and, in a few cases, seemed to help over the crises, where the ordinary tinctures failed.

Weaver, of New Orleans, says that, in an adult, 40 to 60 grs. of citrate of sodium, every three hours, should be continued day and night until the lungs are entirely cleared. He states further that if the citrate is discontinued before complete resolution, there will be an immediate relapse. He has treated 36 cases of pneumonia with this method thus far, and the rapid recovery has resulted in each instance. (*New Orleans Med. & Surg. Jour.*, Oct., 1918.) In cases of relapse, recovery again occurs under the influence of the citrate. This, in his opinion, is absolutely proof that the citrate is responsibility for the recovery by lysis.

Drs. Brown and Sweet, of El Paso, Texas, report the use of whole citrated blood in the treatment of influenza pneu-

monia. They think that the corpuscles are also valuable as probably containing some of the antibodies and they have, therefore, used citrated-blood transfusion. (*Jour. A. M. A.*, Nov. 9, 1918.)

Dr. F. J. Kalteyer recommends the use of stimulating remedies, in an anticipatory manner. He prefers digalen. Some physicians used camphor in oil hypodermically in the cyanosed patients, along with oxygen. I doubt whether either one of these measures does much good in the cyanosis occurring in this epidemic-pandemic disease.

Dobbyn advises applying ice-bags to axilla, neck, groin (over Scarpa's triangle), and popliteal spaces where the great blood vessels are subcutaneous or nearly so—a reduction of  $3^{\circ}$  may be obtained in  $\frac{1}{4}$  of an hour.

Dr. Boston treated all his cases as cases of acute nephritis. Some physicians gave very little in the way of drugs. Dr. M. H. Fussell thinks he got just as good results with rest in bed, fresh air, and plenty of good nourishing food, provided these patients went to bed immediately on the very first appearance of the slightest symptoms, such as, coryza, or headache, or chilliness, or cough. He tried this with the nurses of a large hospital.

However, in general practice, we always found our patients very sick when we were called in, and treatment was necessary and urgent in many of the cases. The expectant watchful treatment would have failed utterly in the large majority of the cases of epidemic influenza-pneumonitis.

Nearly all my patients received the alkaline treatment, consisting of citrate of sodium and citrate of potassium by mouth, and bicarbonate of sodium and saline solution by rectum. The bowels were kept open by administration of mild salines or fractional doses of calomel with bicarbonate of soda. Rest in bed, of course, was the first and most important treatment insisted upon by me. The patient was kept in bed, where possible, for several days after the temperature dropped to normal. I believe that, if it had been possible to keep all the patients in bed for five or six days after complete recovery, and if these same patients had taken to bed immediately on the first appearance of the symptoms of the disease, the mortality and incidentally the morbidity rates, would have

been far lower and complications much less numerous and severe. Some of the patients had marked delirium and symptoms of meningismus. I would suggest in very severe cases of complicating meningism the use of lumbar puncture. This would promptly relieve the symptoms, as reported sometime ago by Dr. Musser in the use of spinal puncture in cases of pneumonia.

It seemed that very little treatment was necessary, comparatively speaking, in cases occurring among negroes. They recovered in a large proportion of the cases. The incidence of the disease seemed much less in the negro race and the disease was certainly not so severe and so fatal in the dark-complexioned people as in those of lighter color, the blond.

#### Convalescence

A liberal diet should be given. For the cough, which may hang on, I found syrup of hydriodic acid (fresh) in teaspoonful doses very useful. This may be given every three hours in milk or water. If the cough is painful and distressing, a capsule containing small doses of dionin, heroin, or codeine with grs. 2 1-2 to 3 each of gualcol carbonate and terpin hydrate, is very useful. For the anemia, wine of citrate of iron, vinum ferri amarum, or vinum ferri et ammonii citratis or "vinum ferri" may be used.

A pill or capsule containing cinchonidine sulphate, grs. 1 to 2; ext. gentian, gr. 1; ext. nucis vom. gr. 1-8 to 1-4, ferri sulphatis (exsicc.) grs. 3 may be given 3 or 4 times daily after meals, or, elixir of iron, quinine, and strychnine may be ordered.

Ordinarily, very little medication is necessary or indicated during the convalescent period. Food, air and sunlight and rest do the work.

#### Summary and Conclusions

To summarize, (1) The exact cause of this epidemic disease and its complications, is not known. It is probably due to a severe malignant infection, mixed in character, with virulent strains of several well-known microorganisms. (2) Mixed bacterial vaccines have proven their worth as a prophylactic measure and deserve further trial. (3) Bacterial vaccines have been of great help in the treatment of the disease and its complications. Although not so scientific as a specific antiserum or antitoxin, and probably not so efficient, yet, since we are not fortunate

enough to have such antitoxin, we are justified in continuing the use of mixed or combined vaccine (or serobacterins) as a therapeutic measure in view of the numerous encouraging reports from everywhere.

(4) A multiplicity of remedies was useless and of very little benefit. Good food, fresh air and rest in bed were highly important. I did not starve any of my patients. They all received plenty of good wholesome light nourishing food. (5) Antipneumococcic serum (type I) certainly is indicated in undoubted complicated cases of lobar pneumonia occurring in this epidemic, especially if due to the Type-I Pneumococcus, but should be used before the type of the infection is reported by the laboratory, as any delay may prove fatal. (6) The chief drug treatment in my cases consisted of giving a combination of aspirin with or without caffeine citrate and cinchonidine sulphate and fairly large doses of strychnine. Codeine, with or without citrate of potassium or sodium, for the cough. (7) The entire treatment, as a whole, in my mind, should be based chiefly to accomplish two ends: (a) The alleviation of the pains, cough, insomnia, and other discomforting symptoms during the first two or three days of the disease; (b) The treatment of the severe toxemia by sweating at the very beginning of the disease, by the use of hot drinks, with or without whisky, hot external applications, vapor bath, together with an ice-cap to the head, and the above-mentioned "urotropin comp. capsule"; opening of the bowels, and flushing them out by enemata, and plenty of water to drink with the addition of orange juice, lemonade, and milk, etc., thus mildly stimulating the kidneys to action. The acidosis element in this severe infection is counteracted by the use of the bicarbonate-of-sodium enemata, and enteroclysis, and the administration of the citrate of potash or citrate of soda, with or without liquor ammonii acetatis, which was given also to alleviate the cough as above mentioned. (8) Isolation and quarantine of houses in which sufferers of the disease are confined would probably be more efficient than the widespread "bans" issued by Boards of Health. These latter tend to scare and frighten the populace unnecessarily, cause great inconvenience, dissatisfaction, and are highly questionable as an efficient measure.

# The Treatment of Chronic Diseases

## Diseases of the Nervous System

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[Continued from November, issue, page 833.]

### Migraine

THE vast majority of headaches of an intense character and which are loosely classed as migraine are, really, of toxic or anemic origin and, therefore, do not properly belong in the realm of nervous disorders. There is, however, a small proportion among them that constitute genuine neurovascular phenomena, consisting, as they do, in a spasmodic contracture of the vessels that supply the brain and thus cause an artificial and temporary anemia that manifests itself as a very intense headache. These headaches mostly are limited to one side of the head (hemiparalysis).

Theoretically, of course, we ought to be able to relieve these headaches quite simply by the administration of some quick and powerful dilator of the arteries, of vasomotors, such as nitroglycerin, or one of the nitrite salts, or atropine in tiny doses. Unfortunately, however, it seems that when once one of these neurotic spasms has established itself, it defies all therapeutic efforts at unlocking, and ordinarily persists until released by a natural process of reaction similar to the process that brought it about. Not infrequently these patients are relieved of their headache quite suddenly and completely by the occurrence of some unexpected and powerful distraction of their attention.

If we can catch the headache in its threatening stages, and the patient can be persuaded to take vigorous action against it, then, instead of trying to "fight it off," it is usually a very easy matter to head it off by the means just indicated, namely, by reducing the blood tension and quieting the nervous system with moderate doses of sodium nitrite or acetanilid and monobromated camphor, in combination with a mild alkaline—the bicarbonate of sodium or of potassium. This, coupled with an hour or so of rest in a cool darkened room or else a brisk walk in the fresh air, according to the temperament

of the patient, as a rule will ward off an attack; or, a hot bath followed by an hour's seclusion and rest is an excellent prophylactic.

When once the attack has established itself, though, more heroic measures are necessary. The same remedies recommended above may be prescribed, but, they must be given in larger doses and—what is more important, still—they must be given in *hot water* or else immediately followed by a draft of hot water. During the attack, the digestive tract shares in the neurovascular spasm and thus is incapacitated for absorbing anything, unless the spasm first is relieved by flooding the membranes with hot water. Hence if the medicines are simply swallowed at such a time, they remain inert in the stomach and small intestine and, so, have no effect. In administering these remedies, it is my practice to have the patient swallow half a tumblerful of hot water or hot physiologic salt-solution five minutes before taking the medicine and another half-glassful immediately afterward.

Sometimes relief can be obtained by inducing rather violent emesis. Many patients themselves have discovered the efficacy of this procedure, although they do not know its precise reason, and they induce vomiting by tickling the fauces or by swallowing mustard in lukewarm water. The general idea is, that this helps by removing from the stomach irritating contents. This, however, is not the explanation. It is the act of vomiting that brings about a relaxation of the entire vasomotor mechanism and, therefore, relieves the neurovascular spasm. Consequently, mere gavage will not serve this purpose; active vomiting must occur.

There are, of course, exceptionally severe cases, in which still more heroic measures must be employed. In such instances, about the only recourse left us is, to compel sleep (which, after all, is the most effective unlocker of such spasms) by means of some powerful hypnotic. But, in

choosing our agent, it is necessary that we avoid those that contract, and must select those that tend to dilate the blood-vessels. Opiates are, for this reason, undesirable. Sulfonal and trional are ideal in such cases, given in doses of 10 to 15 grains in hot water; but, unfortunately, they are not, as a rule, powerful enough in severe attacks. For a more compelling hypnotic, a mixture of sodium bromide and chloral hydrate (of the former, 20 grains, and, of the latter, 10 grains) in hot water is very effective. If the circulatory function of the patient be habitually poor, it is well to give, in addition, a dose of digitalin. This will not interfere with the hypnotic or relaxant action of the other two drugs, but, will guard against collapse.

#### Neurasthenia

It should be remembered that neurasthenia is, essentially, a chronic malady, that its development often is as rapid as its advent is insidious, and the final recognition of its presence may occur only after weeks or months of its existence and after the entire nervous system has become involved. The individual may have been enjoying normal health for some time. Suddenly he manifests a strange, unwonted disposition, is peevish, a prey to unreasoning fears, loses sleep and appetite, is listless and distracted, perhaps even indifferent in his family-relations, and evidently a victim of secret care. Gradually he realizes the fact that he is not himself, that his nerves are seriously unstrung, and that he requires a change—he is neurasthenic and powerless to cope with the conditions to which he is subject.

*Rest, Physical and Mental.*—It can not be too strongly impressed upon the sufferer that great benefit can be derived from rest. This regimen may be regulated according to the severity of the case, being relative or absolute in proportion to the requirements indicated. In milder cases, a few hours of extra sleep daily may prove an efficient means of relief.

Only the most careful study of each individual case can rightly determine the precise procedure to be adopted. The difficulty in determining whether the neurasthenic condition or the gastrointestinal disease was the primary condition of any given patient, often is very great and frequently insurmountable; still, from a prac-

tical point of view, this does not seem to be important.

If the gastrointestinal disease is purely neurasthenic in its inception, it soon becomes much more than this in a large number of cases, and it calls for much the same line of treatment, whether it is primary or secondary. Always, though, rest must be considered the essential and rational basis of the line of treatment chosen, everything else being subservient to its beneficent influence.

Bearing in mind always that the particular neurosis under consideration is, largely and often chiefly, psychological, it is impossible to overestimate the reflex importance of rest in its salutary action upon the mind. Perfect relief from bodily fatigue works wonders in effecting general amelioration, although in many instances gentle and well-regulated exercise is of unquestionable value, especially in certain states and in certain stages of recovery. Released from the wearing anxieties that finally have resulted in a neurasthenic condition, the mental faculties of the victim gradually but surely regain their normal strength and elasticity, particularly if the environment is such as to inspire reawakening hope and confidence.

A new life appears to accompany the results of carefully studied and judicious treatment, and in compulsory, yet, grateful repose the patient soon finds that his thoughts are brighter and more cheerful, his capacity for mental enjoyment is keener, and his physique markedly improved under the influence of the general recuperation. Sleep and healthy digestion, which have, perhaps, long been strangers to him, assume a natural phase; troubles which but lately oppressed the mind with persistent anxiety appear purely imaginary or at least are deprived of their baneful effect, while the entire system responds favorably to the new regimen and watchful care.

The records of this treatment abound in illustrations of its beneficent agency in restoring normal conditions. It is emphasized strongly here as of unique, paramount, importance, in which experience leads me to place almost implicit faith. Change of scene and recreation often is more important than mere physical rest.

*Hydrotherapy*, in the opinion of the most-competent authorities, is an invaluable



able ally in dealing with neurasthenia. It even has been asserted that there is probably no chronic disease in which its application contributes more largely to the betterment of the patient's condition and which renders the beneficial effects of a changed environment, the removal of etiological factors, of proper diet, electricity, and medication more pronounced and enduring.

Nearly half a century ago, Preiss wrote: "Prolonged continuance of anomalies of the nervous system not rarely deranges important functions. Since all function depends upon nerve action and no other remedy is capable of altering the nervous system in a mild manner so rapidly, surely, easily, and thoroughly as water, this simple remedy must occupy the first rank as a nerve tonic." Other eminent writers have similarly endorsed the value of hydrotherapy and balneotherapy in neurasthenia; Jolly recommending the inhibition of large quantities of water as an aid to renal and peristaltic action, its external application being valuable in those cases in which increased excitability is combined with tendency to exhaustion.

One hardly can overestimate the efficacy of cold rubs, half and full baths, with friction, of douches, sprays, and so forth, in their favorable influence upon the cutaneous tissues and upon the circulation and tone of the vessels. Kraft-Ebing asserts that "in the management of neurasthenia the water-treatment is of the greatest value, because, as applied (preferably in institutions), it admits of all possible excitant, calming, and alterative effects upon the diseased organism and its tissue changes." He considers hydrotherapy important in reducing insomnia, while in pronounced neurasthenia he regards it as a valuable aid in regulating cardiac activity, dilating the peripheral vessels and increasing or diminishing (as desirable) the cerebral circulation.

Various hydiatric measures may be adopted, all of them more or less efficacious, according to the conditions in which they are applied. Klemperer is authority for the assertion, amply corroborated by experience, that "in hydrotherapeutic efforts we observe quite an extraordinary and incomparable stimulation of the nervous system, which is reflected upon the various organs." Dr. William N. Draper, speaking of this procedure, remarks: "It

seems to be more effective than any treatment by medicine in stimulating the nerve-centers, in restoring the equilibrium of the circulation and reviving the activity of the organic functions," adding forcibly that "its best results require the appurtenances of a well-ordered establishment, where all the various methods of applying water can be wisely and skilfully directed."

Many like testimonials might be adduced to show that in the water-treatment there resides a veritable means of restoration. "Who can calculate," says Dr. Frederick Peterson, "to what degree we may thus influence the biochemical processes of the body, the metabolism of tissues, the carrying off of degenerated and toxic substances, or determine how much we may affect the vascular neuroses, the local anemias, and the hyperemias of the brain and spinal cord?"

*Electrotherapy.*—With regard to electricity, especially the static form, its use in the treatment of local neurasthenic symptoms—such as morbid cephalic sensations, extreme intestinal atony, weakness of the sexual organs, etc., is generally conceded. In these conditions both faradism and galvanism, combined or alternated, have proved beneficial. Much depends upon the constant application of this subtle force. So far as experiment has shown, its curative property in certain cases seems undeniable, while, as a therapeutic agent in obstinate neuroses, it is inferior to rest and hydrotherapy.

*Drug-treatment.*—The treatment of neurasthenia is marred by the usual quackeries that fix upon a single symptom as the disease. The drugs generally prescribed for their tonic effect are, as Bremer observes, nux vomica or its alkaloids, arsenic, phosphorus, quinine, bromides, iron, hypophosphites, and a few others. None of these remedies will cure; iron is particularly objectionable, since, as a rule, it is not well borne by the neurasthenic. Quinine often is administered in excessive doses for the erroneously assumed complication of malarial infection.

There is no drug (and I say this after careful and long observation) that can restore or create nerve-strength and brain-vigor, as is so often claimed by proprietary-medicine men. The majority of the much-advertised nerve-tonics are not worth a trial; still, these articles are in great

vogue, owing to recommendations of sadly mistaken physicians in good standing. The thousands of barrels of so-called "nerve-tonics" taken annually mean misery to untold numbers of neurasthenics and their families, since such patients, when poor, consider it of greater importance to buy their "nerve-tonics" at the rate of \$1.00 a bottle, than to provide necessities for the family.

*Physical Exercise.* — Complicating the drug-prescription errors there are the errors involving exercise and diet. One of the commonest and most-disastrous prescriptions of this kind given to the neurasthenic, as Bremer properly says, is, to "take plenty of fresh air and exercise." The "fresh" part of the injunction is all right (in some sanitariums, such patients often are compelled to be in the open air all day, even though in bed and when too weak to move about or sit up), but, the prescribing of "exercise" is all wrong. There is a widespread delusion that exercise is beneficial under all circumstances. The acme is reached when the gymnasium and athletics are recommended to every neurasthenic. Many athletics and prize-fighters become neurasthenics by dint of too much muscular exercise. Even in laboring men that have heavy work to perform nervous prostration often results.

Whenever and as often as a muscle is contracted, certain brain-cells enter into activity. The brain in one or more of its parts is, in neurasthenics, the most easily irritated and exhausted. Going to the close functional dependence and interdependence of all parts of the brain, work

of the motor-region governing muscle contraction during exercise must affect other weakened and easily irritable parts. Some cerebrastrhenics whose slightest mental effort is followed by brain-fag can walk long distances without feeling any fatigue, but, this often is an expression of over-fatigue.

*The Diet* is an important factor, but, like other measures, this also is badly abused. Neurasthenics not seldom are advised to eat plenty of nourishing food; and they will gorge themselves, without considering that it is not the amount of nutriment—even when properly digested and absorbed—that determines nutrition, but, the use to which the digested food can be put in the tissues.

The artificial foods have the effect of weakening the stomach by rendering it, so to speak, apathetic, thus interfering with the churning of the food and the secretion of gastric juice. One ounce of butter with bread digested naturally outweighs a pound of beef incorporated in the system under artificial conditions. Beef-extracts are especially objectionable for neurasthenics. Milk and fresh fruit often disagree with these patients. Dietetics, therefore, should be a matter of individual prescription rather than of any general directions. Excess of the proteids and excess of the starches and sugars are to be avoided, since these two excesses, acting in a vicious circle, aggravate each other. Starchy food fermenting in the intestine favors absorption of proteid products of decomposition.

[To be continued.]

#### AN AMERICAN CREED

**I** BELIEVE in the United States of America as a government of the people, by the people, for the people; whose just powers are derived from the consent of the governed; a democracy in a republic; a sovereign nation of many sovereign states; a perfect union, one and inseparable, established upon those principles of freedom, equality, justice and humanity for which American patriots sacrificed their lives and fortunes. I therefore believe it is my duty to my country to love it; to support its Constitution; to obey its laws; to respect its flag, and to defend it against all enemies."

# What Others are Doing

## INTRAVENOUS MEDICATION IN SYPHILIS

The discovery of salvarsan, some years ago, constitutes an important advance in the treatment of syphilis and other protozoal diseases, not so much through providing a definite or new remedy, but, rather, because it inaugurated the intensive administration of drugs known to be of service in these diseases by the intravenous route.

As a means of producing a complete sterilization of the organism, as to protozoa, salvarsan soon was found to be ineffective. It proved, however, to be of superior value for the purpose of introducing into the circulation a large amount of an arsenical compound; and, under methods combining mercury and iodine with the salvarsan treatment, truly splendid clinical results were obtained.

In an article contributed to *The Practitioner* for October, Mr. R. L. Spittel asserts that a comparison between salvarsan and mercury and the iodides has not been a fair one hitherto for the reason that the older drugs have not been administered in the same massive doses and by the intravenous route as was the case with arsphenamine. Keeping this in mind and being conscious of the remarkable powers of iodides in causing the absorption of syphilitic growths, as also of the curative action of mercury upon indurations of chancres and lymphatic glands, Mr. Spittel devoted his attention to these two drugs when, soon after the outbreak of the war, it became evident that supplies of arsphenamine would be increasingly difficult to procure.

Experience had show that all syphilitic lesions react better to a combination of mercury and iodide than to one or the other alone, and the author soon was convinced that the drugs contained in Donovan's solution lent themselves to a form of treatment by which these remedies were pushed to the point of tolerance under ad-

ministration by the intravenous route. He elaborated a solution for intravenous injection which, given in an appropriate manner, produces effects on syphilitic lesions, whatever their stage, that are little short of those obtained with salvarsan. This conclusion is reached after three and one-half years' experience, during which the author has administered over five thousand of these injections.

## MERCURY AND IODINE INTRAVENOUSLY IN SYPHILIS

The solution of mercury and iodine compounds mentioned in the foregoing abstract, and which Spittel (*loc. cit.*) uses as a routine treatment for intravenous administration, is as follows:

Mercuric iodide .....	grs. 50
Arsenious iodide .....	grs. 40
Sodium (or potassium) iodide,.....	drs. 8
Aqua destillata .....	ozs. 40

The solution is made up in the following way: It has to be rendered slightly alkaline, and this is best done by first adding to it 20 minims (1 mil) of a 0.5-percent solution of phenolphthalein, and then neutralizing by carefully adding drops of a 25 percent solution of sodium hydrate (about 2 drachms are required). When alkalinity is reached, the solution begins to assume a pink color owing to the presence of phenolphthalein which, thus, serves both as an index of correct alkalinity and as a coloring agent. Once the neutral point is reached, the alkali is cautiously added drop by drop until a distinct pink color is obtained. If thought necessary, glazed litmus paper may be used as a control of alkalinity, but, phenolphthalein is by far the more delicate index. It is important that the solution should be only slightly alkaline; if too alkaline, a precipitate results either immediately or after some hours or days, and the efficiency of the solution is impaired. Should the color fade on keeping, it means that it has become too acid (due probably to the presence of hydriodic acid); in which

case dilute alkalis should be added until the original pink color returns. The solution keeps well for several weeks, and, if stored in a glass-stoppered bottle under aseptic precautions, it may be drawn upon for injection without subsequent resterilization.

As to dosage and mode of administration, 8 to 15 mils is the dose for an adult. The dose should be small to begin with and gradually increased according to tolerance. Four to six injections at intervals of four days to a week constitute a course. Several such courses should be given with intervals of a month or six weeks between them.

The injection is administered with a 20- or 30-mil glass syringe, into which the required quantity of solution is drawn; the syringe is then filled up to its full capacity with sterile water. This further dilution is necessary to obviate the slight phlebitis that otherwise is apt to ensue, rendering future injections into the same vein somewhat difficult. The solution is introduced into the vein after the usual manner of intravenous injection; should any of it escape into the tissues outside the vein, pain, tenderness and induration are caused.

Results.—There is no lesion of syphilis that is not markedly and rapidly benefited by the injection. One dose is often sufficient to cause the disappearance of recent lesions. The primary sore heals rapidly, leaving little induration behind. The lesions of secondary syphilis quickly disappear as well as such symptoms as headache, osteocopic pain, and others. Cutaneous syphilides of all kinds, mucous papules, snail-track ulcers, et cetera, get well after one or two injections. Tertiary lesions such as gummata, ulcers, nodes, improve with remarkable rapidity; so do joint-pains, headaches, bone-pains, and recent eye affections such as irido-cyclitis and keratitis. A constant feature of these injections is, the inflammatory reaction (Herxheimer) that follows them. Any lesion, whether it be the primary sore, the cutaneous syphilide, the node, or the inflammation of the eye, becomes more painful and inflamed some hours after the injection before becoming painless and subsiding.

The author concludes that, although the claim is not made that these injections should replace salvarsan and its derivatives but, rather, reinforce them, still, when the latter are difficult to procure, or

can not be afforded by the patient, the injections here advocated are sufficient of themselves to bring about a cure.

#### IPECAC IN THE TREATMENT OF AURICULAR DISEASES

There is hardly any drug more frequently prescribed than ipecacuanha, although physicians are not really conscious of how often they do use it. Thus, it constitutes an essential ingredient of the rhubarb, ipecac, and soda combination that is the standard remedy for all undefined functional stomach disorders presenting themselves in the clinics of New York City. It is used in the form of Dover's powder, because physicians know that this is a remedy that gives relief under varying circumstances.

So, in the treatment of cardiac conditions, ipecac has, naturally, been employed in this way as an adjunct, while it also has been given by many as an emetic, with the idea of terminating attacks of palpitation of the heart. Of course, the belief has been that the effect upon the auricular functional disorders was purely reflex.

In *The Medical Record* for August 31, Dr. Louis Faugeres Bishop, records the observation that, in disorders of the auricle, which he believes are very often of toxic origin, ipecac seems to be a valuable adjunct to digitalis. In people that are suffering from fibrillation of the auricle, severe attacks of cardiac distress may occur, in which treatment must be pushed to a degree that it is to be considered as bold. Doctor Bishop often has felt obliged in such cases to order digitalis given until vomiting has been produced. However, on one occasion, when he was afraid that when the vomiting by digitalis came on it might do harm, he combined some ipecac with the digitalis, in order to increase the nauseating effect of the latter. This was indicated, especially since digitalis-nausea may be postponed too long to be of value. On this particular occasion, the response to the treatment was unusually favorable, so that Doctor Bishop has been led to repeat the combination of ipecac with digitalis. Although it does not always hasten nausea, yet, he is under the impression that the effect of the digitalis seems to be improved.

We desire to add to the foregoing that it is owing to the rather slow action of

digitalis and to the necessity of securing quick results in certain heart crises that remedies have long been demanded, the action of which might be secured more rapidly than is the case with the galenical digitalis preparations and also with the more modern products. It is for this reason that the chemically pure digitalin and certain other digitalis products (for instance, the one known as digipoten) are being injected intravenously by many clinicians, and with most remarkable and pleasing results. In this mode of procedure, it manifestly is impossible to add ipecac to the digitalis, while the addition of emetine hydrochloride is entirely feasible, even for intravenous injection. In any event, the desired action of ipecac can be secured much more promptly and energetically from the alkaloid, and it is somewhat of a matter of surprise that so many physicians do not see fit to employ the alkaloid in place of the crude drug.

#### INTRAMUSCULAR INJECTION OF CINCHONINE SALTS IN MALARIA

Sir Leonard Rogers, who is one of the greatest authorities in the world on tropical diseases, contributes to the October 26 number of *The British Medical Journal* a very interesting article, in which he suggests the use, intramuscularly, of cinchonine salts, instead of the quinine salts. Introduced intravenously in large doses, quinine is not free from danger. Cinchonine, on the other hand, is less toxic, while it has the very decided advantage that it can be administered intramuscularly and subcutaneously without causing notable pain. Moreover, it is much more readily absorbed when injected intramuscularly than are the quinine salts. Cinchonism is produced by cinchonine in 15-grain doses in one or two hours, and the alkaloid soon appears in the urine in the form of quinine. This, Rogers has demonstrated by experiments with rabbits.

Comparative experiments with quinine bihydrochloride and cinchonine bihydrochloride injected into the muscle showed that, when the former was employed, 80 milligrams remained in the muscle unabsorbed after twelve hours, while 30 milligrams were absorbed and found in the vital organs—the brain, kidneys, liver, spleen, and adrenals. When cinchonine hydro-

chloride was injected, 40 milligrams remained in the muscle unabsorbed, while 85 milligrams was absorbed, as shown by its presence in the organs named. Thus, his experiments demonstrated that a much larger percentage of the cinchonine hydrochloride was absorbed after seventy-two hours than of the corresponding quinine salt.

The clinical effect upon the animals was even more striking; for, while the animals injected with quinine salts appeared to suffer from no definite symptoms of poisoning, the cinchonined animals became violently convulsed within half an hour after the injection.

A series of experiments tried out with cinchonine, as compared with quinine injections, in malarial patients suffering from the disease in more or less severe form showed up equally favorably.

As a result of these experiments, Sir Leonard concludes that cinchonine bihydrochloride in a 1 : 2 solution carefully sterilized is so rapidly absorbed when given intramuscularly that he considers it nearly as effective in its action in severe malarias as quinine intravenously, while it has the advantage of being much safer and capable of administration practically without pain.

In severe cases of malaria, as well as in patients who vomit when quinine is administered by the mouth, he suggests a trial of intramuscular injections of from 7 1/2 to 15 grains of cinchonine bihydrochloride during the first few days of the attack, for the purpose of controlling the fever and infection, following with full doses of quinine by mouth, to prevent relapses.

#### IN THE FIELD HOSPITAL

Elizabeth Fraser gives, in *The Saturday Evening Post*, a striking picture of the doctor's work in an evacuation-hospital.

An evacuation-hospital, says the writer, is dramatic, picturesque, full of potentialities and surprises, with tragedy, comedy, and broad farce competing for first place every hour in the day.

Here, during a big offensive, when Allied and enemy wounded are pouring in in a continuous stream, surgeons, nurses, and personnel work like fiends under a tremendous pressure, twelve, twenty-four, even forty-eight hours at a stretch. Here, there can be witnessed in the operating-room running fights with death as tense



and thrilling as anything upon the battlefield. Sometimes the wounded man is exactly upon the great divide, hovering between life and death, an extra hair's weight capable of sending him to either side; sharpnel in his chest, his lungs full of blood, breathing like a trumpeter, suffering from shock, exhaustion, lack of food—and still able to smile up into the surgeon's eyes and say faintly: "I'm all right, sir. Take that other poor guy. He's worse off than me."

In cases, like these, three minutes more or less in the duration of the operation spells, all the difference between time and eternity. The surgical team works with the perfect union of a football eleven. In their white apron, caps, and masks, they look like priests performing a rite. The sweat stands out on their foreheads. Their expert fingers move like lightning, yet, precise, unhurried, sure.

In an operation of this kind, with life and death in the saddle and both riding hard, I have seen the assistant hold a watch on the operating team, as if it were a horse-race, and call aloud the minutes, thus: "Three! Five! Seven! Ten!" Two minutes too long, and the patient may expire on the table or die of pneumonia from the added strain of ether on the lungs. Here, margins are short and time is more precious than the weight of iron in rubies.

#### STROPHANTHUS IN PNEUMONIA

Maj. D. Elliott Dickson reports, in the October 19 number of *The British Medical Journal*, a series of 67 cases of pneumonia, with only 2 deaths. These cases were treated in the general military hospital in France to which Major Dickson was attached. The mortality in the hospital area for the same period, including his own cases, was 12.25, in comparison with which the mortality of 3 percent in his cases is remarkably favorable.

The treatment employed consisted in keeping the patient absolutely at rest. He was not, under any circumstances, allowed to sit up, while the examinations of the chest were limited in number to the irreducible minimum. The novel feature of the treatment consists in the use of *strophanthus* from the moment the diagnosis has been made, given in doses sufficient to keep the pulse as satisfactory as possible. It is given in the very beginning of the

illness and is used as a prophylactic rather than as a curative remedy; the idea being to get the drug into the system to antidote the pneumotoxin.

Major Dickson begins with 5 minims of the tincture of the new British Pharmacopeia, repeated every four hours. (The tincture of *strophanthus*, B. P., edition 1914, is of the same strength as the official U. S. P. tincture; but, is four times as strong as the corresponding preparation of the British Pharmacopeia of 1898.) If the frequency of the pulse increases to 120 per minute or more, he gives the same dose every two hours, or even hourly, if necessary. Two minims of tincture of capsicum is given with each dose, to guard against any digestive disturbance. Small doses of heroin were prescribed, to control cough, while cold sponging was resorted to whenever the temperature rose above 104 degrees.

#### PROPHYLACTIC VALUE OF QUININE

In an article published in the October 26 number of *The British Medical Journal*, serious doubt is thrown upon the value of the internal use of quinine, for preventing malaria, by G. Waugh Scott, a physician employed on a rubber-plantation in the Malay States.

The laborers on this plantation were divided into two groups, the first group consisting of tappers—strong men who do comparatively easy work—the other group being weeders, who have longer hours and do more work. Those of the first group were daily given 10 grains of quinine at a single dose, as a prophylactic. In spite of this, there actually was a lower percentage of malaria-cases among the weeders, who had received no quinine whatever. This, even though they worked longer and were physically of a lower type.

#### THE WOUNDED "YANK"

In Elizabeth Fraser's article, published in *The Saturday Evening Post*, we are given a moving picture of what happens to the soldier from the time he is wounded until he is lifted from the operating-table in the evacuation-hospital—and here it is:

"A soldier is wounded on the field, in the trenches, in a wood. If alone, he applies his own first aid. If he has given it

away to a comrade, he uses his belt for a tourniquet, his bootlaces—anything. If he can not get at his wound or if he is knocked unconscious, he lies until he is picked up by a friend or foe. If he is not picked up, he 'goes west,' joining the great host of immortal comrades, and all is well. That is the first step, where each individual attends to himself, is attended to by others or is lost.

"The second step consists in getting him to a dressing-station, usually in some abri, where he is bandaged, given a hot drink and an injection of antitetanus serum, and an iodine cross is marked on his forehead to indicate that he has received the same. If he is suffering acutely, he is, in addition, given a morphine tablet. After this, he is transported by ambulance to the divisional field hospital, where, if he is in good condition, he is not even unloaded, but, sent straight on to the evacuation-hospital a few miles farther back.

"Thus, he receives personal, regimental, and divisional first aid before ever he strikes the evacuation-hospital. All of which, if he is lucky, he may get inside of two or three hours and be safely tucked away in his cot, coming out from under the ether, raving, not of home and mother, but, of going 'over the top', shouting in stentorian accents: 'Shoot 'em to hell, boys! The dirty skunks! Shoot 'em to hell!' To the infinite delight of his comrades in the tent ward, who cheer him on: 'That's the stuff, buddy! Atta-boy! Eat 'em alive!'

"Finally, after much batting of wobbly eyelids, he opens his eyes feebly upon the white-capped nurse at the foot of the bed and murmurs in weak, flat tones of pleasure: 'Well, hello, chicken! How'd you ever git here? Gosh! That's a foul taste in my mouth. Say, can a guy spit in this place?' And if he thus far has come through alive, the chances are that he will stick. He is the stuff that survives."

#### PSYCHOLOGICAL HANDLING OF TUBERCULOSIS

Charles L. Minor, of Asheville, North Carolina, discusses the psychological handling of the tuberculous patient in the *American Review of Tuberculosis* for October. In no disease is the relation between mind and body so close and so important as in pulmonary tuberculosis.

This fact must be recognized as an important factor both for prognosis and treatment, and the complete confidence of the patient obtained. A proper personal atmosphere is important for the welfare of the patient and is often better obtained in an institution than in the home, especially in a cottage sanatorium where a group of patients, socially and financially compatible, are all educated to a proper attitude toward each other and toward themselves. It is essential that the patient be seen for proper psychic treatment as well as supervision. At first, twice a week, and after thorough acquaintance is established, once a week, should be enough. When office visits become feasible a fifteen minute interview twice a week and an hour for physical examination once a month is sufficient. The study of the mental side of the case will become so fascinating that the handling of the case becomes a pleasure rather than a task.

The tuberculous are by no means always or even often abnormal, as has been implied by some writers, though there is a good deal of neurasthenia and hysteria among them and they are apt to have a rather labile temperament. When one considers the terrifying effect, for a person, ignorant of the real nature of tuberculosis, of first learning that he is suffering from this disease, it is no great wonder that it causes a fearful upset of his mental poise and easily produces in any but the most phlegmatic or the most self-controlled a temporary neurasthenia. There is no such school of character as tuberculosis bravely met and rightly faced. No doctor could want a more splendid work than to have a part in teaching these patients to master the bitter sorrow of sickness. He must be hopeful in order to inculcate hope. While there are many that cannot be saved, there also are many who can be restored to working efficiency for long periods or for good, and even in the long drawnout chronic cases life can be made useful and filled with interests and happiness if the patients are but taught to face it aright. A foolish optimism which refuses to see the truth is a miserable thing, that only doubles the sorrow of the patient when he comes to a realization of the facts. But, a wise optimism can yet give him hope and a power to fight whose value cannot be overestimated in its effects on the success of our physical efforts. Finally, the

physician's endeavors should be directed not merely to curing the curable patients but to heartening the apparently hopeless ones to fight to the end.

#### ARTIFICIAL PNEUMOTHORAX AND PREGNANCY

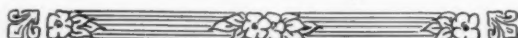
S. A. Slater, Oil City, Pennsylvania, reports a case of pneumothorax treatment during pregnancy in the October number of the *American Review of Tuberculosis*. The woman had always been healthy except for the present illness, tuberculosis. Married in 1905, at eighteen, she had had two healthy children and two miscarriages. In 1908 she had a hemorrhage and in September, 1913, she entered the sanatorium with symptoms of rather active tuberculosis with profuse expectoration containing bacilli. The whole right lung was involved in the active tuberculous process, but, pneumothorax treatment was not attempted because of scattered active lesions on the left side. She stayed in bed, gradually losing ground until March 27th, 1914, when she had two hemorrhages. The lung now was collapsed and all bleeding was immediately controlled. After a second injection, three days later, the sputum cleared up completely and the temperature dropped to normal and remained so. August 29th, 1915, she was discharged free of symptoms and weighing more than ever before, and has been doing her own housework, returning for a refill every four weeks. A year after leaving the sanatorium, she had a three months' abortion without untoward results. On October 22nd, 1917, she passed through a normal labor giving birth to a well developed child of 7½ lbs. which was immediately removed from the mother. Pneumothorax treatment had been continued through the pregnancy and after delivery, the whole period of treatment extending over four years, the sixty-eighth injection having been given a few days before the present report. Both mother and child have done remarkably well. In weighing the indications for the continuation of the pneumothorax during the last pregnancy, it was felt that the earlier miscarriages could not be attributed to this treatment since two had occurred before

the admission to the sanatorium. There was no more inconvenience after taking gas during the pregnancy than at any other time. While it is evident that it is possible to carry out the treatment with benefit to both mother and child, each case of pregnancy should be considered individually. The complication of pregnancy is not in itself an indication for discontinuing the treatment.

#### THE INFLUENCE OF PSYCHIC ACTS

Tohru Ishagami of Osaka, Hamadera, Japan, discusses the influences of psychic acts on the progress of pulmonary tuberculosis in the October number of the *American Review of Tuberculosis*. A variety of clinical observations were made with the following conclusions:

1. Psychic acts frequently influence the course of pulmonary tuberculosis unfavorably and render the treatment difficult.
2. Psychic acts often cause transient glycosuria.
3. The psychic influences upon the disease are accompanied by a lowering of the opsonic index.
4. Sugar and adrenalin both inhibit opsonic reaction.
5. Lowering of the opsonic index in emotional excitement is caused by an increase in the amount of sugar and adrenalin in the blood.
6. Impairment in the progress of the disease is caused both by a decrease in the opsonic reaction and in the digestive function.
7. Overtaxation of the mind of our youths by our unsatisfactory educational system seems to be the cause of the high mortality of young consumptives in our country.
8. The high mortality of our youths from tuberculosis is also partly due to the infection from tuberculous teachers, who in turn are the victims of excessive mental strain.
9. Prevention of excessive mental strain by an improvement in our educational system is one effective means of preventing the spread of consumption among our youths.



# Miscellaneous Articles

## Studies on Food Economics

### Concerning Low-Protein Requirements

THE following note appeared in the September last number of "Science."

*The Need for Nutrition Officers in Military Camps.*—"The Surgeon-General has been authorized to station in each of the larger military camps and cantonments in this country a nutrition-officer, whose duties will be those of an advisor to the camp-commander, the camp-surgeon, and the camp-quartermaster, on all matters relating to the nutritive value of foods.

"There still is need for a considerable number of men well trained in food-chemistry and physiology of nutrition, who can qualify as lieutenants and captains in the Sanitary Corps for this assignment. Upon receiving commissions, these officers will be given training for a period at the Medical Officer's Training Camp, Camp Greenleaf, Fort Oglethorpe, Georgia, and will then be subject to appointment as nutrition-officers or to duty of a similar nature overseas.

"This work has proved to be of signal importance in the interest of proper nutrition of the soldiers and of the economic use of foods both in this country and overseas."

Benjamin Thompson, the Massachusetts prentice boy—afterward Count Rumford of Bavaria and at the present day celebrated as the originator of Rumford's baking powder, known to most housekeepers—fed the army of Bavaria and the poor of Munich a ration in which meat protein was lacking and thus secured better nourishment at less cost than by what formerly they had been fed.

The following article appeared in *The Medical Times* for September last by Charles O'Brien, author of "Food Preparedness for the United States," who said that fear of overstatement of the case led him into error in an article on "Diet Reformation" in *The Medical Times* for

December, 1917, and that he wished to make a correction, as follows:

*Potatoes, Fat and Water.*—"In telling of the marvelous work in matters of nutrition done by Dr. M. Hindhede, of Copenhagen, a brief reference was made to a test conducted by him on two subjects named Madsen. It was stated in the article that they subsisted for over a year on 'potatoes, margarine, and milk,' meantime doing manual labor. The error was in mentioning 'milk' at all. It should have read 'water'—'potatoes, margarine, and water.'

"To our corn-, wheat-, and meat-fed population, this would sound somewhat unbelievable. It was so much so to one of us, to wit, the author, that he unconsciously mentally corrected the truth and included the old, reliable milk. Water seemed too thin. But, water it was. The error is pointed out by Horace Fletcher, a friend of Doctor Hindhede, who was a party to the experiments, in a letter recently received. Fletcher himself submitted to the test for over nine months and says he felt no ill effects from the restricted and monotonous diet.

"The writer had the pleasure of meeting one of the Madsens in Doctor Hindhede's laboratory at Copenhagen. He is a robust, healthy looking, red-cheeked Dane, a gardener, which trade he plied during the experiment besides working about the laboratory. The test showed that on his meager rations of potatoes, margarine, and water he experienced no material loss in health, strength or endurance.

"It was doubtless as a result of the information gained from this experiment that Doctor Hindhede told the writer that he regarded the potato as coming near being the perfect food, milk excented; but, deficient in fats. Hence, the addition of

margarine. It is, of course, the diet prescribed in the experiment.

"The test was not made to prove the efficacy of a vegetable diet, however—for, Doctor Hindhede is not a vegetarian—but, to show that the human can be adequately sustained on a low-protein diet. Hindhede's contention convinced us that it is almost impossible to get too little protein, that mankind commonly poisons itself by eating much of the high-protein foods—meat, fish, eggs, etc.—and that 10 percent of protein is the limit. Less than that is better. He contends that, if the high-protein foods are eliminated, there will be found sufficient protein in the low-protein foods to answer all requirements. The average of the latter is something like 7 percent.

"So, do not worry if the Food Administration cuts you down on wheat, et cetera. Butter your spuds and take a drink of water. Chances are you'll feel better, be stronger, and have more endurance. You may not believe it, but, science says 'tis so."

The high price of meat at the present time makes the foregoing information of great value to the average housekeeper. She also will aid the physician to treat with greater success his average patients suffering from malnutrition. The peasants of Ireland largely feed on potatoes and buttermilk, and they maintain healthy and vigorous bodies on such diet.

In a former article, we gave a brief sketch of the work of this Massachusetts prentice boy and schoolmaster, afterward the British soldier and diplomatist, Colonel Sir Benjamin Thompson, then Colonel of Horse and General Aide-de Camp of the Elector Charles Theodore of Bavaria, then Count Rumford of present baking-powder fame. The greatest merit of this versatile man was, his demonstration of food values and scientific cooking. Thus, for one thing, he showed by his treatment of prisoners how they could be well nourished at small cost and without the element of flesh-protein.

Now we learn from the current literature that our Government is seeking physicians capable of teaching dietetics and cooking in our training camps; however, its quest hardly will be successful without its first training such men, inasmuch as the average physician is sadly deficient in knowledge of this kind.

If food is to win the war, then food

conservation and palatable food preparation is one of the great necessities of our present conflict.

The result of Count Rumford's experiments on feeding the army of Bavaria and the poor of Munich was, that the men's nutrition was improved at half the former cost, this being attained by cutting out the meat ration.

A. T. CUZNER.

Gilmore, Fla.

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**THE STORY OF JOSEPH GARUFE,  
PRIVATE FIRST CLASS, COM-  
PANY L, THIRD PLATOON,  
— INFANTRY**

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On August 9, 1918, we had arrived at a large village in France that was under shell-fire, day and night, by the Boches. This village was situated on the bank of the Marne, which at this point was about thirty feet wide. Across the river, was "the front". Our contact patrols and observations had informed us that the enemy was in force in the woods just beyond the further bank of the river.

At about midnight, orders were received for us to filter across and take cover till next morning, and, by crossing this way, the entire company finally arrived on the other side without attracting any unusual attention from the Hun artillery.

On August 10, about 3 in the afternoon, the command "Forward" was passed along the line. We had to cross another part of the river by fording it where the water was up to our necks and we had to hold our rifles over our heads to keep them dry. Reaching the other side, we advanced along a very good road till we came to a small hill. Here, the first platoon was sighted by the Boches, who immediately signaled their artillery for a barrage. We saw that the enemy was on three sides of us. Machine-gun fire, with its deadly rat-tat-tat-tat-tat, opened up on us from their guns hidden behind trees and up in trees. My platoon deployed to the right and kept advancing, while overhead screamed the barrage-fire, the shells fortunately dropping some distance behind us and doing us no damage.

We were running along the road, closing in on the enemy, when a hand-grenade exploded close to me. One of the flying fragments struck me just above the right knee and I pitched forward to the ground.



As I fell, I slid over the side of the road and down a small embankment, where, below, there was a ditch with running water about a foot deep. From the way in which I fell, my wounded leg was lying in the water, while I was unable to move because of the pain in the injured leg. I knew that it was broken and was bleeding freely. On the road between me and the enemy, at short distances apart, there were lying five others of my company, wounded. The enemy, gaining reinforcements, advanced, and my company fell back. As our men passed where I was lying, they tried to help me to get back with them, but, the pain in my leg was so great and I was absolutely unable to help myself that they left me and helped some others that were not so badly wounded.

Night fell and pangs of thirst compelled me to drink of the water in the little ditch in which my bleeding leg was resting. German soldiers came out of the woods and looked us over. I offered them 45 francs (all the money that I had) to help me. They paid no attention to my appeals, but, seemed very much interested in finding out that we were Americans. One of the wounded able to walk was compelled to go along with them when they left. I remained where I had fallen and, the pain easing a little, I was able to go to sleep along toward morning.

Awakened about daybreak, I reached down and carefully placed my wounded right leg over on top of the left one, turned on my left side and started to drag myself toward the rear. By pressing my left elbow into the ground, reaching over the head with my right hand and seizing tufts of grass and roots, squirming along a few inches at a time, I laboriously moved about 50 yards to where I saw a German dugout. I called out several times and by and by two Boches soldiers came out very cautiously. Seeing that I was wounded and not capable of harming them, they approached and questioned me. I offered them my little pile of money to help me. One of them took the money, applied my first-aid packet to my leg, took my leggings for a souvenir, and then left me. They carried the other four wounded Americans down to where I was lying, so that we were together, and then they disappeared into the woods.

We had plenty of water, but, no food. All that night we saw signal-rockets flaring

in the sky. The battle continuing, shells were bursting about a hundred yards away from where we lay. A barn about 500 yards away was set on fire by one of them.

When morning came, I again tried the trick of placing the wounded leg over the other one and dragged myself along to the dugout and slid down into it. One of the other wounded Americans, who had both knees shattered by machine-gun bullets, dragged himself along to the top of the dugout. I lay on my back on the floor and caught him as he allowed himself to slide down. The dugout had a board floor; we found good blankets, a stove, some brackish water, ammunition, some "potato-mashers", but, no food of any kind. We made ourselves as comfortable as we could for the night.

The next day and the next, I crawled out of the dugout looking for water. I found several American canteens and one large German canteen full of water. With these, repeating the trip, I would return and share with my wounded companion who couldn't get out. On the third day, hunger compelled me to look farther. About 100 yards away, there was an old orchard, and to this I managed to crawl. Here, I found apples, and in the remains of a garden I found some turnips and radishes. These I took back to the dugout and shared with my companion. My progress was very slow on these trips. My clothing was pretty well worn off on my left side from the constant dragging over the ground, while my elbow was raw from using it to push myself along. It took me from 7 o'clock in the morning till about 3 in the afternoon to make the round-trip.

On the morning of the 18th of August, a week after I had been wounded, I determined to look for help. So, placing all of the water and apples and vegetables that remained, in order that my companion could reach them, then fastening an old pillow to my raw elbow, I started away from the dugout, and dragged myself to the creek. Finding the bridge broken, I managed to ferry myself across on a plank to hand. On the other side, I dragged the plank after me, as I worked my way along on the opposite bank and used it as a means to get across shell-holes. In this way, I covered that day about a kilometer and a half toward the American lines. All the time, the artillery duel was in progress between the German cannon that were far

behind me and the American cannon that were far ahead of me. As night fell, I slept where I was, tired, wet, and cold, while, from the exertion, my leg had started to pain again.

The following morning, I started toward a small bridge ahead of me, but, found it broken in the middle. So, again with the aid of my plank and an empty barrel, I ferried myself across to a small boat-landing on the other side. Paddling underneath it and reaching overhead, I caught hold of the flooring, and, after repeated efforts, managed to pull myself up upon it. After resting, I proceeded to crawl to a house about 600 yards distant. Here, I found a small piece of very hard bread and in the water-pipe was a few drops of water with which I moistened the bread and devoured it. I pulled myself up on a bed in one of the rooms and went to sleep for the night.

Starting out again the next morning, somewhat refreshed after my night's sleep, I made my way down the street of the village, working in the direction from where I knew the American artillery was firing. I came to another orchard and there found plenty of apples. All this day, the artillery-fire kept up. I passed a large church and houses, but, saw nothing living except a small dog. I found what had been a German dugout, crawled in and remained there for the night. There were here a lamp, some furniture, telephone-wires, and a bottle of sour wine. My leg was now bothering me a great deal and seemed to be turning black.

On the morning of the 21st of August, I again started out toward the firing, but, my progress being very slow, night once more came on, when I crawled into another ruined house and went to sleep. Here I found a vase full of withered flowers. I dumped them out and drank the water. There was no food there of any kind. Early in the morning, I awoke and, looking out of the doorway, I saw American soldiers. I called to them several times before they heard me. Several of them came in and, seeing my condition, sent for litter-bearers, who carried me to a first-aid station. A medical officer gave me something to eat, a shot of A. T. S., splinted my leg then, by ambulance, sent me to field hospital, where I had my clothing (what was left of it) cut away, the leg dressed, received hot food, and was placed

on a hospital-train bound for Base Hospital 101.

This lad's story struck me as being a splendid example of the pluck and staying-powers of American troops, and I will finish by saying that, after arriving at the base, Joe was operated upon that same night. He had three operations in all, for, pus had worked along the muscle-sheaths and had to be evacuated, while the wounds had to be drained. Joe now is convalescing. The femur was broken at the junction of the middle and lower thirds. A bone-graft may be necessary, but, he will, eventually, have a good leg, in spite of all of the disadvantages, the liability of gangrene, mixed infection, and all that his hardships entailed.

LT. ROBERT C. MURPHY, M. C.,  
Base Hospital 101,  
A. E. F., France.

#### INFLUENZA AS TREATED BY AN ECLECTIC PRACTITIONER

The Surgeon-General, U. S. A., may know how to treat so-called Spanish influenza, but, treating diseased conditions and curing them is quite another proposition. Let me tell you that my old-school friends here and in many of the places the world over, in treating this disease, have lost from 10 to 20 percent of their cases because of their heroic medication. I have just discharged my 76th case of Spanish influenza (grip), in 10 of which pneumonia supervened. I have not lost a single patient.

If you will follow the trail of a good eclectic or homeopathic physician for the last two months, you will find his fatal cases to exceed not 2 percent. I know what I am talking about.

If I found the patient to have a flushed face, contracted pupils, and a full, bounding pulse, I gave specific medicine gelsemium and veratrum viride; if the pulse was weak, aconite, not veratrum was given; for muscular soreness, macrotys is the remedy; when there are dilated pupils, with eyes partly open, belladonna is in order. I rely upon iodized calcium for cough, sore throat, and bronchial irritation. I give lobelia whenever indicated.

Now, if a physician knows enough to read the tongue and facial expressions, is a good diagnostician, and will lay aside

prejudice and heroic medication—such as large doses of aspirin and all the other coal-tar derivatives—and keep his patients in bed for from ten days to two or three weeks, he will cure all his grip-patients or lose not more than 2 or 3 percent of them.

J. E. CALLAWAY.

Chillicothe, Mo.

—  
All depends upon what is meant by "heroic" treatment. Certainly, the management of influenza, as we observed the course of this disease during the last few months, requires energetic and definite treatment, besides great care in the prevention of complications and sequels. Doctor Callaway's treatment, conforming, as it does, to the "indications", as understood by eclectic physicians, as these indications present themselves, undoubtedly is excellent. However, other physicians likewise have been successful in the treatment of their grip-patients, and that by employing remedies and doses that Doctor Callaway probably would criticize as "heroic."

We confess to having had during the first one or two days of the disease, a predilection for acetylsalicylic acid, although we are in the habit of guarding the heart, while administering this remedy, with cactin or monobromated camphor. The administration of iodized calcium and of calcium sulphide, both to full effect, may be considered heroic, yet, the practice is clearly indicated and has been productive of good results. Furthermore, the leukopenia, which is characteristic of this form of influenza, is logically combated with nuclein solution, given hypodermically.

In general, the treatment of influenza has to be largely symptomatic, that is to say, controlling fever and pain, supporting the heart and the nutrition, relieving the cough, and preventing pulmonary congestion. Lastly, the patients have to be put on some efficient tonic, in order to overcome the weakness following the severe fever-attack.

#### THE INFLUENZA SCOURGE

It is 2 o'clock in the night and I am up from a relapse of this "flu" unable to sleep, because of my great nervousness and because one of my twin daughters is now down with this disease.

If "war is hell", what is this influenza? And, putting the two together, then, it is

what? Doctor, we are just now up against some of the great questions of the age. In our extremity, what shall we do? Nearly all my old-home doctors are dead or dying or sick with this dread disease, including my brother, Dr. A. R. Nason, at Tomnolen, Mississippi. It is awful! Yet, the American is marvelous and we are winning an unprecedented victory over a most atrocious foe. We have struggled so long and so many have had to die of as unconquerable [?—Ed.] a disease as the Germans are as foes, before we can enjoy health.

We, here, are losing every case of pneumonia, no matter what the treatment that is tried. People are dying without medical attention, because they can not get a doctor, and when they do get one of us, of what good are we? I say, really, of what good are we?

Calomel has done more for me than any one thing, save, perhaps, echinacea. What are you doing in Chicago? If you know of anything that will save a poor doctor and his family, tell us of it—yes, wire me immediately.

Excuse my poor writing—I am sick. My head is in a whirl, and, when it hits you the second time, there is some boom to it, I assure you.

I happen to know authoritatively that one night last week 350 died in 5 wards in your own city of Chicago, while next-day's *Chicago Tribune* named only 250 deaths for the entire city.

A. L. NASON.

Darling, Miss.

—  
That terrible scourge, the "flu", has passed over us. At one time, I was the only doctor able to be up. One came down with the disease early and was abed. Another, in an adjoining county, visited a son ill with pneumonia, and the third doctor was away at the deathbed of his only son, who died at college. Our valley is 15 to 20 miles wide, and, to say that I was kept on the move does not express it. Besides, I had to cross the mountain and do work in another valley, seeing 34 families a day and having from 1 to 8 cases in each house. I had 5 down with pneumonia and lost them all.

You never can make me believe that whisky will not cure pneumonia. Iodized calcium did good service, too: the temperature will fall, from 105, to 103 degrees in

ten minutes, and then your whisky comes in. Many, many deaths have occurred; never the like of it has been seen in these parts. At present, now and then a new case comes on, but, I think, we are about over with it.

For the pains and fever, I use 5 grains of acetylsalicylic acid and 3 grains of quinine sulphate every three hours. I kept the bowels open with calomel, podophyllin, and bilein. I was so tired out that I barely could get up when down. I hope that you escaped an attack. I, myself and my daughter, fortunately, escaped. I kept her close at home.

Three-fifths of the victims have sore throat. I used gargle-tablets, composed of sodium salicylate, sodium bicarbonate, and boric acid, 3 grains of each to a glass of water. I ordered gargling every hour.

W. S. CLINE.

Woodstock, Va.

[We print these two letters out of many that were received, as they are characteristic of frequent appeals for assistance that have come to this office. In numerous parts of the country, the members of the medical profession, already overworked on account of the many medical men now being in the service, were, literally, swamped by work; moreover, the epidemic proved so severe in some regions as to be truly a terrible visitation.

Whether it is that in our part of the country the disease was less virulent or that we had taken early and prompt precautions, we are grateful, being able to say that we have passed through the epidemic at relatively slight cost. To be sure, there were some deaths in the families of some of our coworkers, but, not many. Most of the patients recovered promptly and returned to their wonted occupations after only brief periods of illness.

In an epidemic like this one of influenza, it is advisable for everybody, no matter how well or "fit" he may feel, to take proper precautions against contracting the disease, inasmuch as it virtually is impossible to escape being exposed to the infection. We have insisted upon a general and careful disinfection of the upper air-passages (nose and throat), by means of a mild antiseptic solution. As soon as the Rose-nov influenza-pneumonia bacterin became available, it was freely administered in prophylactic doses, a course of three in-

jections being given to all who would submit to it. In this manner, we are certain that many, who otherwise might have yielded to the infection, preserved their health, while in those few who, nevertheless, became ill, the disease appeared in a very mild form.

As to the treatment of the actual disease itself, we have repeatedly expressed our views and refer to the various articles printed in the October, November and December issues of this journal.

Of course, we hope that the epidemic may die out speedily all over the country. yet, we must keep in mind that it is likely to recrudescence here and there all through the winter, and, in accordance with the results of epidemiological studies, we are led to believe that an aftermath of the epidemic may possibly make its appearance coming in February or March. For this reason, it behooves all of us to be on our guard and to treat every ordinary "cold" and winter-catarrh energetically and, indeed, as though it were a case of the justly dreaded "influenza".—Ed.]

#### TOXIC SYMPTOMS IN INFECTIOUS DISEASES

When in a case of influenza I have a diarrhea, I take it as conservative on the part of nature. Certainly, the elimination of toxins in that way is conservative, for, such patients usually have lower temperature than those without diarrhea. So, I don't treat the diarrhea *per se*, but take it as an indication for removing the cause, not of the diarrhea alone, but of all the symptoms of influenza as well. See?

Now, here is a case of severe night sweats, day sweats too, for that matter. I believe this condition also to be conservative. But, what is, in phthisis, the underlying occasion for this increased perspiration which should be removed or obviated rather than the sweating itself.

This is for publication or not as you please; perhaps it's merely "a foolish Query No. ....", but, I want an answer, and want it d— bad.

ELMER F. GOULD.

Lincolnville, Maine.

[We quite and fully agree with you in assuming that diarrhea, fever and night sweats are symptoms of toxemia and evi-

dences of the attempts on the part of nature to counteract the foreign injurious substances (the infectious bacteria) that have invaded the body, and to remove them as well as the products of their harmful action upon the tissue cells.

Whenever something foreign to the organism invades the body, the attempt is made to remove it. Thus, for instance, if a sliver is lodged under the skin, there is an accumulation of white blood cells, then, of pus cells, which loosen the firmly lodged sliver in its bed and tend to remove it outside of the body in the direction of the least resistance.

When bacteria invade the organism, mainly through the upper air passages, they also are removed by the production of bronchial and nasal secretions. However, if they find lodgement in the mucous membrane and have succeeded in giving rise to inflammatory manifestations, these in themselves are evidences of the organic resistance. In this manner fever may appear, and it has often been claimed, as long ago as the days of Sydenham, even before him, that fever is a defensive provision of the organism against injurious outside influences that have entered the body. Fever, though, is due likewise to the development of bacterial and other toxins and represents the endeavor of the organism to form substances that neutralize and disintegrate the toxins—namely, antitoxins, or immune substances.

These toxins do not only give rise to fever but may cause various other symptoms, notably diarrhea; and here we come to the question in point. Diarrhea is to be viewed as a reaction on the part of the organism, either to remove irritating substances from the intestinal tract or to eliminate toxic and other noxious elements from the blood. It has been shown that bacteria and their products are eliminated in part through the intestines, in part through the kidneys, and in part, of course, through such anatomical lesions, for instance, tuberculous ulcerations in the lungs and elsewhere, as their action has caused. Undoubtedly, the diarrhea that is often observed in infectious diseases, including influenza, is truly a conservative provision; conservative in so far as it tends to eliminate harmful substances and thereby relieve the body. It should, therefore, not be suppressed by treatment but should be managed in such a manner that the body does

not get weakened unduly by the excessive peristaltic function and does not lose too much of intestinal contents that otherwise might be of use.

In the case of night sweats, likewise, we have to consider the underlying causes. Night sweats, like diarrhea, are best treated by removing the cause, that is to say, by detoxicating the body rather than by suppressing either night sweats or diarrhea, these being simply disease manifestations and not disease in themselves. In both instances, in diarrhea as well as in night sweats, it has been observed quite correctly that the fever temperature is lower when these symptoms of intoxication are well established. Also, if the symptoms do not become excessive in severity, they usually will be followed by increased well being and by a diminution in the severity of other disease manifestations.—Ed.]

### THE FLU

When your back is broke and your eyes  
are blurred,  
And your shin bones knock and your  
tongue is furred,  
And your tonsils squeak and your hair gets  
dry,  
And you're doggone sure you're going to  
die,  
But you're skeered you won't and afraid  
you will—  
Just drag to bed and have your chill,  
And pray to the Lord to see you through.  
For you've got the flu, Boy,  
You've got the flu.

When your toes curl up and your belt goes  
flat,  
And you're twice as mean as a Thomas cat,  
And life is one long and dismal curse,  
And your food all tastes like a hard-boiled  
hearse,  
When your lattice aches and your head's  
a-buzz,  
And nothing is as it ever was,  
Here are my sad regrets to you—  
You've got the flu, Boy,  
You've got the flu.

What is it like, this Spanish flu?  
Ask me, Brother, for, I've been through.  
It is misery out of sheer despair;  
It pulls your teeth and curls your hair,  
It thins your blood and brays your bones,



And fills your craw with moans and groans,  
And sometimes, may be, you get well,  
Some call it flu,—I call it HELL.

ANONYMUS.

### DOCTOR WAUGH

Doctor Waugh was one of nature's noblemen, and to say that I was shocked beyond expression when a recent number of *CLINICAL MEDICINE* announced his demise puts it mildly indeed. Then it was that his careful words of encouragement and advice, when my daughter—who was the wife of Senator H. W. Grout, of Waterloo, Iowa, was dying of pernicious anemia, and also his tender words of sympathy after her passing at a Colorado sanatorium, came back to me with great force. It means something for a man of our departed friend's caliber and innumerable responsibilities thrust upon him to write letters of sympathy in connection with his medical advice; and, if true nobility of character, honesty of purpose and pure simplicity ever were harmoniously blended it was in the life of Doctor William Francis Waugh.

I have a letter of more than usual interest written from his winter home in Texas that I shall treasure as one of my choicest possessions. Few men ever live to leave behind them such a enviable record as has Doctor Waugh.

I am truly grateful for the beautiful portrait of him so kindly enclosed with the journal by the publishers.

C. M. H. W.

Blaine, Ill.

### CONCERNING HOMEOPATHY

I am a homeopath. If that be treason, make the most of it. I am always interested in the things said in *CLINICAL MEDICINE* ament homeopathy. But, I am even more interested in the relief of suffering and the cure of disease, and that is why I take the magazine.

Much that Hahnemann said has been disproved by modern research, but, I often wonder whether the fundamental principles he enunciated are not even more generally recognized now than they ever were in the past. It seems to me that the movement of medical theory among all medical men is increasingly in the direction of "*similia similibus curantur*". That sounds pretty

strong, even to me. This movement, surely, is not appreciated; nevertheless, it may be very real.

No one would cry "Anathema" if I should say: "The oldest and best-known example of artificial immunity to disease is vaccination against smallpox, in which by inoculating with an attenuated and harmless form of smallpox (*sic!*) the vital forces are put on guard and immunity to the real smallpox is established." Or, again, if I should remark that "it has been found that the normal animal body responds to the injection of very small amounts of certain bacterial toxins by the formation of antitoxins that are essentially antidotes to their respective poisons". No one would sit up and take notice.

Phylacogens and active immunity are scientific facts. Also, they are homeopathic. Chickenpox, which is not smallpox, leaves something in the body, a phylacogen, that activates the defenders of the body against smallpox infection, which is very similar. An animal product from outside the body puts the body on its guard. This animal product in a healthy body, when in excess, produces symptoms similar to those that in its attenuate form it cures. "This immunity corresponds precisely to the specific character of the vaccination."

This is as far as most of my good readers have gone. Come on, boys don't hang back! Guess! Make a good, broad guess, that possibly not only an animal product, but, vegetable and mineral substances as well, that in excess will produce certain symptoms in a well person, will rouse the prophylactic powers of the body to contend with a disease exhibiting those symptoms. The dose should be small enough so as not to overcome the guards, yet, large enough so that it will activate them.

A. L. KENNAN.

Hillard, Fla.

[The contention, that the modern concepts of immunology and the modern methods of immunization are "homeopathic" in their basis, by no means is new, having been advanced by many writers in homeopathic journals and substantiated especially ably by the learned editor of *The Hahnemannian Monthly*, Dr. G. Harlan Wells. So far, we are quite willing to agree with Doctor Kennan. However, if he reasons, by analogy, that possibly "not

only animal products, but, vegetable and mineral substances as well, that in excess will produce certain symptoms in a well person, will arouse the prophylactic power of the body to contend with a disease exhibiting these symptoms," then an unconditional acceptance of his proposition is more difficult.

It has to be kept in mind, though, that bacterial substances are not animal, but, in all probability vegetable in nature, the bacteria having been classed with the schizomycetes and other forms of lowest plant-life; while only the protozoa, such as those responsible for the spirillooses, also the plasmodium of malaria and a few others are "animal" organisms.

It remains, then, to be inquired into whether higher forms of vegetable substances, such as those making up the vegetable drugs in common use, act upon the organism in the same manner. Since our views of immunity are based largely upon the side-chain theory, according to which substances can be absorbed into the organism if there are present certain specific receptors that are attuned, as it were, to the substances introduced parenterally, it would have to be determined whether the organism possesses receptors "attuned", to, say, digitalis substances or to strychnine or to cocaine, atropine, morphine, and so on. It has been denied that such is the case. At any rate, there is not sufficient information available to determine the question.

As to the further assertion, that mineral substances in minute doses may give rise to the same sort of immunity as do lower vegetable substances, that does seem extremely unlikely basically. The question raised by Doctor Kennan is largely speculative and would have to be investigated very carefully before any definite and positive information could be gained concerning it.—Ed.]

### THE ETYMOLOGY OF PIU-PIU

The nickname piou-piou (current spelling, piu) is, by French lexicographers, defined as a foot-soldier. However, slang words, arising, as they do, out of the lower strata of a people, are lawless excrescences to which the rules controlling the language can not be applied; while, moreover, the French tongue is peculiarly given to strange mutations of the sounds of

speech. Note, for example, *peau*, pronounced *po*, is a contraction of Latin *pellis*, or *cau*, pronounced *oh*, is Latin *aqua*, or, *clou*, pronounced *cloo* is Latin *clavis*.

So, then, suppose we take a look at *pion*, the French equivalent of our "paw" (at chess), but, which originally is a regular designation for a foot-soldier. However, the original spelling, as also its pronunciation, was *peon*. But, *peon* now is the Spanish name for a man held in servitude because of a debt, although normally it means the same as in French. Now consider that our English "paw" is precisely the same as "peon"; also, that, in chess, the German designation for this is *bauer*, meaning "farmer".

This English word "paw" formerly was written "paune" and "poun" (vowels sounded as in German), since in Old French it also had the form of "poon".

Now to the point. Peon is directly derived from the Latin *pes* (*pedis*), French *pied*, and related to which are, Greek *pous*, German *fuss*, English *foot*. Consequently, *peon* and *pion* and *pionnier* are precisely the same as English "pedestrian"—man on foot, that is, an infantrist. This, of course, does not explain the transformation of *pion* into *pion*, unless, as said before, we allow for popular corruption, such as always plays a role in spoken language and of which we today have painful examples galore. At any rate, when one has, for years, followed up the most astounding permutations encountered in etymology, he is ready to accept almost anything half-plausible.

Next, we find the word "pioneer" taken from the French, and it means, first, also a foot-soldier, then, modernly, a soldier detailed to prepare the way for the army, and thus, secondarily, one who prepares the wilderness for settlement.

Connecting with what was said in the first paragraph, the following digression from the text possibly may be permitted by the Editor, for the purpose of demonstrating the peculiar vicissitudes to which the elements of the Indo-European languages are subject. I have chosen the word water—which, by the way, we here discover to be one of the very oldest elements of this family of human speech.

English, water:—O. Fries. *wetir*, OHG. *wazzer*, G. *wasser*, Swed. *vat*, Dan. *vand*, Gath. *watdh*, Russ. *voda* (cf. *vodka*), Gr.

hydor, Skr. udan, L. unda (wave and water).

English, wet:—Gr. hygros, Skr. ud and unatti (to wet). See "water".

English, dropsy:—E. hydropsy, Gr. hydor (water).

English, whisky:—I. usige (wash, water, i. e. water of life).

English, otter (a water-animal):—Lith. udra, Russ. vuidra, Gr. hydra.

Latin, unda (wave, water):—E. redound (L. re (d) undare), to roll back in waves. E. abound (L. ab-undare) to overflow. E. surround (L. super-undare).

English, wash:—AS. wascan, Swed. vasca. From E. water. E. wipe:—G. wisch (rag for wiping), Skr. pra-unch (to wipe), Skr. unch, from venscho, to wipe.

Further, Webster even seems to connect winter and weather with "wet", "water".

While this word-study, as stated, has nothing to do with medicine, nor even with our "piu", may not it serve to remind some of the readers of their "unabridged", gathering dust in a dark corner, and to inspire them, when snowed in on wintry eves, to delve into those wondrous pages, the educational as well as entertainment value of which is, alas, understood by all too few. How few, even, are aware of its value to doctors for purely professional purposes, besides general scientific subjects!

ADOLF G. VOGELER.

Chicago, Ill.

Memorandum in explanation:

E—English	D.—Danish
AS—Anglo-Saxon	I.—Irish
G—German	Goth.—Gothic
OHG—Old High,	Lith.—Lithuanian
German	Russ.—Russian
Gr.—Greek	O. Fries.— Old Frie-
L.—Latin	sian
Skr.—Sanskrit	

### IS THE FAMILY PHYSICIAN TO BE REPLACED BY THE COOPERATIVE CLINIC?

Doctor Hirshberg's "Engineer's Lament" (CLINICAL MEDICINE, August, p. 619) is a fiction of his own perfervid socialized mind; but, then, he adds that it is "almost wholly true". Not quite, "almost wholly true", Doctor, but almost wholly damnably false.

When this war broke out, America sud-

denly woke up to the fact that her higher educational institutions were saturated with German "kultur", with materialistic and socialistic philosophies and scientific absurdities. The medical profession, especially, was overstocked with pseudoscientific fads, fakes, and frauds. And, while the general public was not slow in unloading its part of the noxious cargo, the profession still is hugging its delusions, although most of them are dead and putrid, and it is time to take an inventory of stock and make a good housecleaning.

The clinics that Doctor Hirshberg mentions, from that of the brothers Mayo down, have degenerated into mere mechanical laboratory-machines, from which the human, the personal element has been almost wholly eliminated; people going to those clinics are not patients, they are just material, the same conditions prevailing there as those that were so well known in all German clinics for many years. They do, however, all seem to possess superhuman facilities both for self-advertising and for belittling and discrediting the general practitioner. And, inasmuch as nearly all state and many municipal health-boards and state universities maintain laboratories where tests and examinations are made at a nominal cost, I fail to discover a crying need for any more laboratory facilities, especially when one considers the fact that much of the work done in that direction is just a refined and concentrated system of pure graft.

To specify: take Koch's tuberculosis bacillus, now well known to be a universal bacillus that is found in the sputum of 92 percent of healthy persons [?!—Ed.] and, therefore, has no diagnostic significance whatever; and, yet, the practice is almost universal to base a diagnosis of tuberculosis upon the finding of that bacillus. The fakery of it might be excused; however, thousands of sick people have gone into untimely graves, because of the depressing effect such an ill-advised diagnosis has made upon a sensitive overwrought organism. The Klebs-Loeffler bacillus, also, is a universal microbe, being found in healthy throats as well as in many acute diseases other than diphtheria, such as, for instance, measles, scarlet-fever, pneumonia, and other infections, while in some of the most virulent cases of diphtheria it can not be found. And still you see many doctors, when they get a case of sore throat, send

a swab to a laboratory and base their diagnosis entirely upon the finding. When one considers the fact that there are many kinds of sore throat and that not more than one case in ten is one of true diphtheria, the absurdity of such a method of diagnosis becomes apparent. And then they will charge their patients, many of whom can ill afford such expense, from \$5 to \$15 for the examination and from \$5 to \$25 additional for administering antitoxin. And this kind of work is not done by the country practitioner, either, but, by the very elect "specialists" in our centers of population! It is enough to make an honest man furious, for, it is the most stupendous piece of graft that the medical profession ever has been afflicted with.

The Wasserman test for syphilis has proved entirely worthless, while syphilis is such a serious malady that any one basing his diagnosis of its presence or absence on this test not only jeopardizes his own reputation, but, also the safety and happiness of his patient. The indiscriminate use of x-ray work in surgery prompts the query, whether it would not be better to have a few poorly set fractures and dislocations than to have so many maimed for life by x-ray burns.

I might continue in this vein, however, what I have presented will suffice to illustrate the charges made; and I am not decrying laboratory work, but, merely the abuse of it. The competent physician, however, makes his diagnosis from the clinical evidence, supplementing and verifying this by reliable laboratory tests. And the "woods are full" of such general practitioners, who are safer, surer, and better diagnosticians than your cooperative-clinic-laboratory, ultra-scientific specialists-in-fads doctors; and they do not have to suck their thumbs, either, in order to reach correct conclusions.

The last part of Doctor Hirshberg's article, where he quotes the Surgeon-General, together with his own concluding paragraph, are both unwarranted flings at the civilian physician. I know that during the winter and spring in many, if not all, the military camps the death rate from pneumonia, measles, and cerebrospinal meningitis was appalling. When one considers the fact that those young men were picked for their physical fitness and that there is no acute disease that is so easily

controlled by modern therapeutics as is pneumonia, one can be excused for being thoroughly disgusted with the Army Medical Department.

As for the social diseases, I know that conditions at our state military camp actually were terrible, that the War Medical Department failed miserably in having control over the situation, and that the city authorities of Des Moines confessed their inability to remedy the trouble, that public opinion became aroused to a high pitch and brought so much pressure against the disgrace that the government at Washington had to interfere toward correcting the evil. And I also know that in many other camps conditions were but little better. When our boys were down on the Mexican border, the same conditions prevailed there. The medical department confessed its inability to control it, and General Funston issued a drastic order, giving camp-followers twenty-four hours to leave, those remaining to be shot.

But, the worst load that the medical profession of America is carrying today is, not social diseases, but, just Socialism, a disease of a low order.

Socialism is an assumed name and shows how a world of iniquity can be covered up and glossed over with one euphonious word. The real name for those of that faith (?) was, for many centuries, heathenism. And it is these worthies that are responsible for the propaganda for health-insurance as well as for the cooperative-clinic agitation.

And what is Socialism? Just envy, the envy of the shiftless against the thrifty. One of the inspired prophets tells us that Satan became envious of some of his fellow angels and started a revolution, for which he was cast out of heaven. But, he managed to gain an entrance into the Garden of Eden, where he seduced Mother Eve, thus introducing evil into the world; and the two forces of good and evil have been contending for the mastery ever since. Also, the sacred historian tells us that Abel was thrifty and prospered, for which he found favor with the Lord, while Cain was not thrifty, and, so, became filled with envy and rose up and slew his brother Abel. So, Cain became the first Socialist (heathen). And the spirit of Socialism of today is exactly the same as that of Cain, from the unlettered bomb-throwing anarchist to the



## OUR ROLL OF HONOR

REPRESENTATIVES OF THE ABBOTT LABORATORIES  
THE SLEE LABORATORIES AND THE AMERICAN JOURNAL  
OF CLINICAL MEDICINE WHO HAVE SERVED OUR COUNTRY  
IN THE ARMY AND NAVY DURING THE GREAT WAR

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RANSON R.M. *U.S. Navy Radio*  
BRUSH C.E. *U.S. Navy Radio*  
LEIBOLD A.A. *1st Lt. Medical C*  
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REYNERTSON G. *S.A.T.C. NWU*  
SMITH A. *S.A.T.C. NWU*





most learned professor in our higher institutions of learning.

However, it seems that, when once a man becomes infected with the malady, the more cultured and educated he gets, the more virulent and vindictive he becomes. The advent of the Christ, promulgating the doctrine of the fatherhood of God and the brotherhood of man, was the first serious opposition to Socialism. They talk glibly of this humanitarianism, but, the voice is that of the wolf in the sheepskin, for, all real Socialists are atheists and antichrist, and there can be no real brotherhood without a father. And Christ gave us the rule that "by their works shall ye know them", and, if you will read through a whole library of socialist literature, you will find that almost every page of it breathes envy and threatens revolution.

Compare the work of the Christian organizations of America with organized Socialism, from the great missionary societies, the Red Cross, Y. M. C. A., K. of C., Y. W. C. A., Christian Endeavor, Salvation Army, the Belgian, Syrian, and Armenian relief associations, and others too numerous to mention. These, since the war began, have expended billions of dollars in humanitarian relief work and have rescued and saved millions of human lives. And what has organized Socialism done? Echo calls back, "What?" They have, however, succeeded in keeping the department of justice at Washington busy the year round. A year ago, their national committee at Chicago voted to raise a million dollars, ostensibly for campaign purposes, but, really to get and keep their members out of jail and to keep them off the gallows.

When a Socialist gets well advanced in the order, so that he can talk loud and long, he becomes an Internationalist, ceasing to be a man, but, becoming a creature without a country and without a soul, hated of God and despised by man. Some of the foremost of their graduates, among others, are Lenine and Trotzky, Sir Roger Casement (executed for treason), and "Big Bill" Hayward (sentenced to the penitentiary).

This war has brought to light in a startling way the complete union of all the evil forces in this world, from the heathenish aristocracies of Europe to the Bolsheviki of Russia, from the Sinn

Feiners of Ireland down to our own I. W. Ws.

Some of the world's greatest statesmen have tried to answer the question, What are we fighting for? Some say, to destroy obsolete autocratic governments, some, to make the world safe for democracy, others say, to make the world a decent place to live in; but, every thinking man feels in his inner conscience that none of the answers are satisfactory, for, there might be a righteous autocracy. Abraham was a typical autocrat and he walked and communed with God. On the other hand, a real democracy like the present one in Russia, is just an illustrated *de luxe* edition of hell on earth.

We surely are not fighting to make the world safe for any such democracies! No, the question is a much larger one, yet, also a very simple one. It is just Christianity against heathenism, or Christ against Satan. And, to illustrate, just compare France and Germany. "By their works shall ye know them". Noble, heroic, self-sacrificing France! All her actions, from the beginning of the war, have been typically those of a Christian nation, while Germany has violated every law in the decalog, in addition to which she has invented fiendish outrages that the author of that code had never dreamed of, atrocities so diabolical that they would make the most accomplished fiends in hell greeneyed with envy. In fact, the head of the Prussian autocracy is the very personification of Satan incarnate.

I close with the prediction that an overruling Providence will not permit the Prussian autocracy to sue for peace until its power is completely destroyed.

W. A. MARNER.

Miles, Iowa.

[We hope, Doctor Marner feels better after having let off steam in this emphatic manner. However, he is in error regarding the frequency and importance—or the nonimportance—of pathogenic bacteria, such as the bacillus of tuberculosis and that of diphtheria. For one thing, the tubercle-bacillus is not found in the sputum of 92 percent of healthy persons. Evidence of tubercle-bacillus infection has been detected in so high a percentage of healthy persons in certain communities, but, in these instances, the bacilli were imprisoned in the lymph-glands, and were not found in the sputum. Whenever the tubercle-

bacillus is found in the expectoration, this denotes an open tuberculous focus and one that always is contaminated with secondary infective microorganisms.

In short, the finding of tubercle-bacilli in the expectoration means phthisis, or pulmonary consumption. To be sure, the bacilli may persist in the expectoration during convalescence, and even for a long period afterward. If convalescence is well on the way and the tuberculous lesions are healing, the little red rods, however, will show evidences of disintegration.

It is true, though, that tubercle-bacilli as well as those of diphtheria have been found in the nasal passages as also in the pharyngeal secretions of healthy persons. But, this was the case only in people who had been in close contact with patients ill with these respective diseases, and, the fact that the bacteria were found in the secretions of healthy persons does not show the innocuousness of those germs, but, only the satisfactory immunity or the resistance on the part of those who are thus infected, yet, without acquiring the disease.

We are persuaded that Doctor Marner views conditions more darkly than is justified by fact. The modern methods of laboratory-research, especially of clinical-laboratory research, undoubtedly are of the greatest benefit in enabling physicians to arrive at definite diagnoses more speedily than they could by clinical observation alone. That methods like the Wassermann test for syphilis or x-ray examinations are erroneous and useless, is incorrect, as are other opinions that are voiced by our correspondent. Of course, if complicated investigations are undertaken merely for the purpose of increasing the fees, they become vicious. But, we absolutely refuse to support Doctor Marner in his contention that the physicians of the United States are a lot of grafters and thieves. We venture to say that, with few exceptions, the work done by physicians is absolutely honest, done in good faith and by no means with an eye primarily to the dollars that may be involved.

Frankly, we rather deplore Doctor Marner's attitude as evidenced in his criticisms and accusations, believing that they are unjustified and unjust. This is true also in great measure regarding the strictures of the medical service of the Army.

We are quite aware of the fact that serious epidemics occurred and that many of

the soldiers succumbed to them. We also are aware of the fact that many unfortunate instances of insufficient preparation and service have occurred. In a few camps, the management both of the medical service and in other respects seems to have been woefully lax. On the whole, however, it must not be forgotten that we can not judge from isolated individual occurrences, but, that we must think in large figures. From this point of view, the morbidity as well as the mortality among American soldiers and sailors has been far less than that of the Japanese army which hitherto has claimed the best records.

When Doctor Marner indulges in a condemnation of Socialism and its vicious outcroppings, we can not follow him, either. That, though, concerns questions of a non-medical nature in which we prefer not to express opinions. If not too much space is asked for, however, we shall be ready to accept a few replies to Doctor Marner's letters. But, please, make it concise and short.—Ed.]

#### PHYSICIANS WANTED IN IDAHO

W. D. Keller and Son, druggists at Culdesac, Idaho, are anxious to secure a good physician for that locality, asserting that there is a big field for a general practitioner in that location and that one is sorely needed. We suggest that physicians looking for a good opening with plenty of work communicate with the firm mentioned.

#### GOVERNMENT AID TO WOUNDED SOLDIERS

The United States Government is resolved to do its best to restore every wounded American soldier and sailor to health, strength, and self-supporting activity.

Until his discharge from the hospital all medical and surgical treatment necessary to restore him to health is under the jurisdiction of the military or naval authorities, according to the branch of the service he is in. The vocational training, the re-education and rehabilitation necessary to restore him to self-supporting activity, is under the jurisdiction of the Federal Board for Vocational Education.

If he needs an artificial limb or mechanical appliance the Government will supply it free, will keep it in repair, and renew

it when necessary. If after his discharge he again needs medical treatment on account of his disability, the Government will supply it free. While he is in the hospital and while in training afterwards, the soldier or sailor will receive compensation as if in service and his family or dependents will receive their allotment.

A wounded soldier or sailor, although his disability does not prevent him from returning to employment without training, can take a course of vocational training free of cost and the compensation provided by the war-risk insurance act will be paid to him and the training will be free, but no allotment will be paid to his family.

Every Liberty Bond holder who holds his bond is keeping up a part of this great work of restoring to health, strength, and usefulness the men who have suffered for their country.

#### LETTER FROM FRANCE.—V.

The burial-grounds of the Americans who fell on the field of honor during the months of June and July are being put in perfect order, so that, when the war is over, their relatives will be able to find the resting-place with little difficulty.

Around Lucy-le-Bocage, where the Marines first went into action, and around Boursches and the Belleau Woods the Americans advanced so rapidly that it was possible to give only a temporary resting-place to the brave ones that had fallen so gloriously. Small parties were detached to throw a few spadeful of earth over them on the spot where they had fallen face downward in their first on-to-Berlin rush. Many of them fell in shell holes, which were easily enough filled up for the moment. Others fell in the open, and comrades would stop long enough to throw a little earth over them and put up a cross.

Now all those shell holes are being searched out, the bodies are being removed, their identification-discs carefully collected, and the bodies are being placed in proper graves in rows along the road. The bodies are being buried in groups of twenty-six, side by side, with a wooden cross marking the head of each individual grave. On every cross, there is placed an aluminum plate bearing the name and number of the soldier, with one of his identification-discs attached just below.

The ground is being searched inch by

inch, so that there is no possibility of any of these glorious lads that have lost their lives for their country being overlooked and left in an unmarked grave, and it is a great satisfaction to note how very few of the aluminum plates bear the word "Unknown".

Detachments of Negroes were at work under the supervision of a white sergeant and several other white soldier assistants. While they agreed that it was a frightful undertaking, they said that they were repaid by the thought of the satisfaction that would be derived by the parents of these fallen soldiers, because of the knowledge that their sons were being buried so that their graves might be found after the war. In many instances, valuable jewelry and other personal articles, are found on the dead, and these are sent to the parents without delay. Recently, the body of a lieutenant was brought in, on whom 12,000 francs was found. It was difficult to decipher his name, but, it was something like Milsen, and he was from Philadelphia. Those in charge never lost sight of the fact that the parents may decide to take their dead home after the war is over and always the graves are made carefully with that thought in mind.

The groups of graves are not all near together, but, are scattered along the road, where they occupy space that would not be used for anything else and indicate the first path the Americans took on their road to victory. The graves are not merely barren mounds of earth, marked with their simple wooden crosses, but, in many cases, the soldiers of this detachment have stopped to form the letters "U. S. A." with tiny white pebbles embedded in the earth, and have planted flowers; while, of course, the flag is there, too.

In looking from a hilltop, not far from Belleau Woods, over these American graves, with an occasional French coardec marking a fallen brother and a German's grave here and there (I recall one marked with a German spiked helmet), one might be overcome by the pathos of the situation; yet the glory of it all is so overpowering that the pathos is lost and one comes away filled more with pride than sorrow.

Broadway sent a shining star to Longchamp last night, to brighten the hearts of the men of the Ambulance service stationed there, and the star, Miss Irene

Franklin and her "Broadway bunch" made a big hit with the Longchamp camp. The same charming personality that has won her audiences in the States was evident on the improvised stage in the Longchamp mess-hall. The songs were full of snap and brightness, and in response to popular demand she sang her immense success, "Redhead". Together with the "Broadway bunch", appeared the "Magic-Melody-Mirth" Company. They won the audience from the first and their place in the memory of the ambulance men is assured.

Soldiers stationed in the Paris district have their choice of several entertainments this evening, when three theatrical groups, that are operating under the auspices of the American Y. M. C. A. are to appear.

Irene Franklin and her "Broadway bunch" at Fort de Stains; D. C. MacIver's "Magic-Melody-Mirth" at Hotel Pavillon; Adler's "Laugh Barrage" at Orly.

The "Magic-Melody-Mirth" Company, which also will play a Saturday matinée at the U. S. Hospital at Auteuil, provides a very good evening's entertainment. The company consists of D. C. MacIver, Hai Pierson, Madeline I. Glynn, and Alfred Armand. MacIver was, for four years, a magician and illusionist of high standing on the vaudeville stage. Some time ago, he retired from the boards to engage in mining in Arizona, but, when the call for volunteers for theatrical work in France reached him, he gladly packed up his black book and came over.

A "Laugh Barrage" is a pleasing mélange of humor and songs, with Harry Adler, ventriloquist, manager; Kate Condon, Amy Horton, Paula Sherman, and David Lerner.

In one month's time, the 5,000 refugees returned to their homes in the reconquered districts of the Aisne and Marne have been aided by the American Red Cross. Forty-five carloads of supplies have been sent since August 5 to Chateau-Thierry, Essonnes, Dormans, Troissy, Verneuil, and Villers-Cotterets. These camions, known as rolling grocery-stores, make the rounds of the districts, to supply the needs of the homecomers in the places where no shops have as yet been opened.

Arrangements are now being made by the American Red Cross to send out a

force of workmen for provisional repair-work in the shell-ruined villages. More than 100 peasants returned each day to Chateau-Thierry and nearby towns. In the Somme district, the Red Cross is gathering supplies in huge warehouses, in preparation for the return of the refugees. The equipment includes everything, from paint-brushes and chicken-wire, to food and coal.

The villages are now simply piles of ruins. The roofs are torn asunder, the walls overturned, exposing the interior of what once were happy homes. Fragments of broken furniture are scattered here and there. The belfry of the little church, has, in falling, broken through the vaulted roof of the nave, and a great image of crucified Christ stretches out suffering arms upon this sinister chaos. The fires still are smouldering in place. An acrid and sickening smell seizes upon one; the smell of the Huns. They were still here last night.

An American battalion that was in the very thick of the fight is endeavoring to find billets among these ruins. The men have been promised three-days' rest. Worn and fatigued, covered with mud, their cheeks fevered, the men throw down their packs and throw themselves down just anywhere—be it in gardens ploughed up by shells or in roadside ditches. The tents have not been pitched and every man is obsessed by the one, single thought—sleep!

On the morrow, the sun is shining. Toilet-sets appear from all the packs; the men wash and shave themselves, clean their uniforms, and change their linen; the fatigue and privations of past few days already are nearly forgotten. Suddenly shouts of joy resound. From the window of a small house, not quite so completely demolished as the neighboring ones, the Stars and Stripes are floating and a red sign bearing the letters Y. M. C. A. is being discerned.

During the night, three autos had arrived, laden with chocolate, milk, cigars, cigarettes, biscuits, candy, soap, newspapers, or in a word everything that delights a soldier. Miss B., who is in charge of this expedition, has, with the assistance of her valiant volunteer staff, cleaned up this miserable hovel and managed to lend it quite a festive appearance. Her trim figure is seen everywhere; her gray-cloth costume, cut on military lines, her highlaced boots, her blond hair straying from under her



big felt hat, her gentle blue eyes are well known to this Division.

Where shells were falling yesterday and poison gases were still lurking this morning, there now reigns a feminine smile. May you be blessed, you, who, risking your own life every day, thus comfort with your presence the brave men that have done their duty!

Experiments with a new system of partly restoring sight to the blind are being made at Nice. This system is the invention of a Polish savant named Kann, a soldier in the Foreign Legion, and is based upon the principle that, even when the eye has been removed, the optic nerve may remain sensitive to rays of light. This invention is an apparatus resembling a Carnival mask, and it contains prisms and a chamber in which the rays of light are filtered. This apparatus is connected with a small induction-coil in the patient's pocket. With the help of this contrivance, blind men have been able to identify all the colors of the spectrum, as well as ordinary white light and shadows caused by solid objects. One wearer succeeded in distinguishing the outline of pieces of furniture and in counting uplifted fingers. The experiments are being continued.

The rehearsals of the war choir of the Paris American Church of Holy Trinity will be resumed when applicants for membership can attend. This choir, composed of soldiers, sailors, and men and women war-workers of the Allied Red Cross, Y. M. C. A., all volunteering their services, has sung at many ceremonies since its organization in last March, notably at the Memorial-Day Service on May 30.

Demands of the military and relief organizations cause fluctuations in the strength of the choir. The choir will collaborate with the French choral society, the Chanteurs Classiques de Passy, of which Mr. Gustin Wright, the organist of Holy Trinity, also is conductor, in giving a series of oratorios and musical services during the winter for American soldiers in Paris, beginning next month.

Doctor Dommartin, head physician of the Nice military command, yesterday visited the American hospital No. 107 bis and the Russian hospital No. 139, to present four medals of Reconnaissance Francaise, the

first that have been awarded in Nice. At the American hospital, the silver medal of the second class of this new decoration had been awarded to Mrs. Alice Dulany Hunter, the wife of the American Consul, who is the directress of the formation: and to Mr. Richardson Robinson Riley, the American Vice-Consul, the administrator of the hospital.

The recipients of this decoration at the Russian hospital are, Count Michael Rohozynsky, founder and administrator of the hospital, and Princess Ouroussoy, the head nurse. Doctor Dommartin could present only the ribbon of the new decoration, as the medals have not yet been struck. The ribbon is white, edged with blue, white, and red.

At each hospital, the principal physician indicated the titles of the recipients of the new distinction to the recognition of the French Government. Everyone here knows how perfectly these two voluntary hospitals, which are entirely dependant upon their own resources, are administered and with what untiring zeal and constant care all the nurses attend to those in their charge.

Nowhere in France is a single incident or occasion allowed to pass that in any way appears to give a chance for the French to show their appreciation of an love for America and Americans. While American troop-trains were passing through Enghien les Bains, a work-train crashed into a troop-train, and one American soldier, Private William MacKnight, was killed outright. Another man, Private Ward Lewis, was terribly injured. Four other men were more or less seriously hurt. MacKnight's body and five wounded were brought into Enghien les Bains. They were then taken to the French Hospital of the Casino. Privates Ward Lewis and Henry D. Lowery were both operated upon in the presence of Mrs. Addy Weaver, of the American Red Cross; but, in spite of all possible help and devoted care, Private Lewis died at about midnight, and on Monday morning, at the American Hospital, Private Lowery passed away.

An impressive funeral service, arranged by the Municipal authorities of Enghien, was held for Privates Lewis and MacKnight on Saturday evening, near the Hospital. Red Cross men and women were present at the service. Many beautiful

flowers were placed on the coffins by French, British, and American sympathizers. The ceremony was an impressive one.

Doctor Helary, the mayor of Enghien les Bains, in an eloquent oration, paid a high tribute to the American army and to the unfortunate young soldiers. Many of the inhabitants of Enghien accompanied the hearse. A detail, which will speak for itself, is that, notwithstanding the deceased Americans having been of the Protestant religion, Abbé Simonin, Rector of the Catholic church of Enghien, brought to the cemetery a beautiful wreath of flowers to the funeral and was among the leading followers of the poor boys' bodies.

When Newton D. Baker, United States Secretary of War, landed in France for his present visit, his first official call was upon two representatives of the American Red Cross, the Misses Lansing, who organized at this port a canteen for the American wounded returning to America. Secretary Baker was accompanied by John D. Ryan, formerly a member of the Red Cross War Council and now at the head of the American aviation; by the brigadier-general commanding the United States army at that point, by the French admiral who received him, and by Captains Hitchcock and Hooker, of the American Red Cross. He immediately congratulated the Misses Lansing upon their reception of the War Cross, and was keenly interested in the work which they are doing for the wounded soldiers returning to America.

This is one of the more recent activities of the American Red Cross. The two workers that have organized it have a central receiving-point for sandwiches, hot drinks, cigarettes, chocolate, et cetera. Here they oversee the making of sandwiches and hot drinks for the soldiers, and from here they take them to the boats and distribute them to the soldiers on the lighters carrying the men out to the hospital-ships. In the unavoidable delays between detraining and getting settled on the boats that take them to America, there sometimes are long intervals when the soldiers have no regular meal served to them. It is a comfort to them to be sent off to America with a parting Godspeed from their Red Cross friends in France and with sandwiches, hot drinks, and cigarettes. Naturally, Secretary Baker was much interested in an undertaking which is especially devoted to the welfare of the wounded sol-

diers returning to their native land—heroes who have done their part, and done it well.

Details received from Murcia and Valencia confirm the news that the Spanish grip has again broken out in those provinces, and the population is alarmed. At the town of Lorca, a girl belonging to one of the best families has succumbed. At Catarroja, Alcira, and Valencia, itself, there are many new cases of the epidemic.

The situation is much aggravated by the fact that, on account of the scarcity and high price of food, the inhabitants are in a state of weakness that favors the spread of the epidemic.

B. SHERWOOD-DUNN.

Paris, France.

## THE EIGHTY-NINTH MILE-POST

Inhospitable vicissitudes have been passed through and surmounted in the last stage of this tremendous pilgrimage of mine. The climax was reached a year ago, as I have told, in sustaining a fractured skull and loss of blood but slightly short of causing dissolution. Since then, a marvelous change came over the spirit of this tropical dream, tantamount to my resurrection to an active state of rejuvenation. A fresh blood supply filled my depleted arteries, setting back my physical and mental faculties at least a score of years. The surprise thus given was almost a startling one to my friends, the superstitious natives who witnessed my rejuvenation.

Maybe some superannuated professional brethren, trembling on supporting canes of senility, might like to know something about this process of my recuperation in this period of wasting of old age. As to the copious letting of old blood which I then experienced, I hesitate to urge it upon others, although believing it was the active factor in my own transformation. In the practically hopeless semi-comatose crisis, fresh boiled milk, steaming-hot, was brought to my bedside any hour both by married women and young girls, with the cheerful salutation of "Doctor, aqui esta su leche" (Here is your milk, doctor). And I should scorn any man so unappreciative as to turn up his toes under such inspiring influence, when those gazell-eyed lassies, as beautiful to a fading eye as Beatrice is reputed to have been dazzling, ever were importuning: "Doctor, hurry up

and get well, we need you so much." Who of all of you could have had the heart to leave them, with no promise of some other doctor taking your place? The crisis passed, I had a plate of oatmeal mush with two well-beaten raw eggs stirred in after it had cooled enough not to coagulate the albumen; and, three times a day, I had egg custard and ripe bananas boiled in the skin. Remember, bananas thus treated are far more nourishing than is the best cooked beef meat.

I went to work in the office again within ten days; and a month later was in the streets, skipping over the rolling hills of this quaint old city like a young man, although the fracture in the skull continued to ooze for more than six months. My robust, vigorous health, in fact, has in no degree abated.

While hatred of Americans is almost rabidly intense, I, personally am more popular with every class than any native possibly could be. German propagandists have intensified this hatred, and have wrought the army and a large percentage of the civil population to such a degree that they would have made war on the United States, only the impoverished and destitute condition, which the long-protracted revolution developed, rendered this impossible to attempt, especially with rebels ready to attack such invading army in the rear. But, now, that the high tide of German prosperity is ebbing, there is little cheering hope here of a German victory. Wealth from plundered agriculture and rich American cities and the restitution of Texas, New Mexico, and California comprised the most tempting propaganda the Germans ever offered, and one that really seemed feasible to the duped Mexicans.

Mexico is almost as deplorably ruined as are Belgium, northern France or Russia, the depredations committed by its own native people being almost as atrocious as those of the Germans in the countries named.

There is no hope of a Mexican peace. Possibly a moral pressure by England, France, and the United States might be so employed as to intimidate the hostile spirits, after peace is made in Europe, which now seems to be nearer than we had expected but a short time ago.

I have been tugging at the tense patience of CLINIC readers with the long-winded spirit of the "old story", finished and

mailed to Chicago more than four years ago, so that I am seriously uncertain as to the selection of proper subject matter to interest you.

The revolution, destitution, hunger, misery, and death continue unabated, only more intensified.

I am at a loss for something to say along therapeutic lines, as I am jogging along with my well-confirmed favorite remedies, now fully familiar to the profession. In September, your war-board denied me vaseline, quinine, oil of any kind, and sundry other items once deemed indispensable, thus teaching me to get along very well without them. I have seriously adopted calcium sulphide, in place of quinine, both to break fever and to prevent its recurrence; while "staniloid" does many more good turns than the makers and the profession realize.

You people should be immeasurably proud of your American president, who will majestically tower in the loftiest niche of the temple of immortal fame after the mere names of previous heroes and conquerors have been submerged in the gulf of oblivion. Truly, Wilson had a great America to lead, but, his magnetizing guidance and electrical utterances inspired the good and intimidated the bad to such a degree that universal "Liberty" will become more than a fleeting dream; and he will be recognized and revered as the creative genius, as Washington was the Father of his Country.

ROBERT GRAY.

Pichucalco, Mexico.

[Doctor Gray's remarkable recovery from the serious injury that he sustained is little short of miraculous. Nor can we be content with passing it off without at least a brief comment. The question obtrudes itself upon the present writer's mind whether the great affection and veneration in which the natives hold him, the need that they have of his services, and his own untiring devotion to his work did not combine to mobilize forces and influences which became active in his behalf and brought about his recovery. The days of miracles are past, you say? Perhaps so. The present writer does not believe so, however. Truly, there are more things . . . . At any rate, we trust that Doctor Gray may be spared for his work, and that his strength may continue for long.—Ed.]

# After the World War

## THE MAKING OF AN ARMY MEDICAL OFFICER Life at a Base Hospital in France

*(Continued from December issue.)*

I was fortunate to hear and see Elsie Janis at one of her first performances for the troops in France. She went from camp to camp, reciting and singing at each, and was received with a roar of enthusiasm everywhere she went. Shortly after her visit, I saw in the papers that a great many of our American theatrical stars were going to follow her example, coming over here to entertain our troops at camp, post, and field. This offer of theirs shows a wonderful spirit and is but one of the incidents that go to show that you who are at home are with us in this big game and are but waiting each for his or her opportunity to do anything possible to help, and in any way possible. The French entertainers have already been doing this for some time. They come and sing at the hut of the Y. M. C. A. for all that can come to hear them and after the performance go to the wards where there are many bed-patients, repeating the entertainment for those. This is highly appreciated by all of us, but, particularly by those that are unable to get out of bed.

Sometimes these entertainments were staged by the Y. M. C. A. and sometimes by the Red Cross (American). The American Red Cross was active at this hospital. One of their representatives would distribute the daily papers and magazines through the wards, on other days he would pass out games, stationery, and books, write letters for the patients that were too sick to write their own, and would undertake to straighten out legal affairs at home. They distributed phonographs to many of the wards, changed records as often as possible, placed a safety razor in each ward for the men to shave themselves, had at their hut a miniature circulating library, where patients could get other books to take to their wards. The patients would sign a card for the book, to insure its return when it was

read. Their chaplain held services on Sundays, in the Y. M. C. A. hut, while during the week he visited wards, helping in every way that he could, giving temporal as well as spiritual aid and comfort, accompanied funerals and read services at the graves of the soldiers that had died. A small part of an army-chaplain's duties is, to write to the nearest kin of a soldier that has died, telling the loved ones at home that their soldier lad had had a military funeral, telling where he has been laid to rest, and extending sincere condolences.

One of our nurses died of pneumonia shortly after I arrived at this post. She was given a military funeral. The cortege was led by a brass-band (from a neighboring infantry regiment), then followed, respectively, a firing squad, a soldier carrying a wooden cross, two chaplains and an American Red Cross representative, an automobile ambulance with her remains in a flag-draped coffin, about twenty of our Medical Officers, all the nurses that were off duty or could be spared from their wards, and a detachment of enlisted men of the Medical Department. The band struck up the "Dead-March", and, to the cadence of its slow strains, we wended our way to the cemetery. Arrived there, a short prayer was read by the chaplain, three volleys were fired as the coffin was being lowered into the grave, and then taps was blown on the bugle. She was shown all the respects of a comrade-in-arms. Heroes are not all in the front-line trenches.

Decoration Day was celebrated by the American troops in France in much the same way as we do in the States. Detachments from the various camps and posts around this section assembled at the American cemetery, where short speeches and prayers were said, while the nurses from our hospital decorated the graves of the American soldiers that were buried there. As a final, taps was blown by a bugler. Taps, or lights-out, the sweet sad strains ringing through the cemetery stir a feeling in the heart that is hard to describe, and,

while listening to it, many a silent vow was made that each would acquit himself or herself creditably of the task laid out for us in this battle for democracy.

The French cooperated to the extent of sending a regiment of their troops from the nearest barracks, to act as escort. A group of French officers came along, also, and were very much impressed and interested by the ceremony. This was a very pretty compliment to our Government, our customs, and our soldier dead.

July Fourth also was celebrated as at home. Here, again, the French people showed their desire to be with us in our celebration. Flags of the Allies were to be seen everywhere along the streets, on buildings, and on vehicles. The American and French flags predominated, and in most cases were grouped with other flags or these two crossed together. Detachments of troops from the different organizations, stationed around the city escorted by detachments from the French and English troops, paraded the downtown streets. As we swung along the Boulevard de l'Océan through two solid lines of cheering people, it took but a small effort of the imagination to think we were back on Michigan Avenue, in the "City of the Lake", where on many a holiday some of us had taken part in just such a parade. The afternoon of the Fourth was, generally, celebrated by field and track meets, by base-ball games, and by sports.

On July 14, the French Independence Day, I happened to be in another city away over at the other side of France, having been ordered there to take a special course in the treatment of shock. All American officers in the city were expected to take part in the parade in honor of the day. Parades are as meat and drink to me, and, so, I was at the place of assembly on the morning of the 14th, long before the appointed hour. A reviewing-stand had been erected on one side of the principal parkways, or boulevards. The American officers fell in in double rank, near the stand. Along the boulevard, other detachments of American and French troops assembled. A French general, accompanied by his staff, walked along the line of troops. As he drew near us, we came up stiffly to attention. He quickly came to a salute, smiled and said, "I am very glad to see you here," then asked some of our ranking

officers to accompany him and his staff along the line. At the presentation of medals, we were drawn up in double rank, just behind the French officers and soldiers, who, by virtue of some valorous deed, were there to receive from their appreciative government this token of official recognition.

I had never seen one of these presentations before, so, I was deeply interested. The General read an account of how he had won distinction, ending by saying that in the name of the President of the French Republic he presented him with this medal. He then stepped smartly to the soldier or officer, touched him lightly on each shoulder with his sabre, pinned the medal on the left breast of his tunic, kissed him lightly on each cheek, shook hands with him, adding a few evidently commendatory words, then returned quickly to his place and called out the next one.

After the presentation of honors, the troops marched past the reviewing-stand, in which were the prefect and many civil and military officers. The American troops were given the post of honor, in the lead. Our troops looked very grim and business-like in O. D. uniforms and steel trench-helmets, carrying their rifles with fixed bayonets. They received their fair share of the applause as they swung along with a quick step and excellent alinement. The French troops followed, dressed in their picturesque uniforms. The whole made a very pretty sight; that will not soon be forgotten.

Getting back to our subject of life at the hospital, I feel that I must mention the fact that we had a most excellent mess. Prices of meats and vegetables are higher than in the States, but, thanks to the management of a most efficient "Officer's Mess Officer", we had very good meals at a dollar a day. Our mess-hall was decorated with Liberty Loan posters, to cover the otherwise severely plain boards. Strung across the rafters, were small Allies' flags, while over the two doorways we had groups of larger flags of all the Allies.

A mobile surgical team was formed from among the surgeons at the hospital, ready to leave at any time and for any place where the need was great. Gas-teams were formed, also, specially instructed, and ready to leave at any time for any part of the front or near the front, where the gas cas-





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A Red Cross Camp.

ualties were greater than the local force of surgeons and nurses could handle consistent with the really excellent service that our Government wants the troops to have. I feel that the Medical Department is gaining its fair share of credit in this war, as well as are the rest of our troops. My lucky star is still with me, for, I was chosen for one of these gas-teams, and I am eagerly waiting orders to go forward.

In an Army Hospital, the ward-surgeon is allowed perfect freedom in his method of treatment. He is responsible for the property therein, and, in general, is the law, so far as that ward is concerned. Second in command is the nurse. When neither the surgeon nor the nurse is there, then the ward-master is in charge. The ward-master's duties are many and varied. He must see to the proper policing (cleaning) of the ward, that the walking patients take their showers regularly, reports to get ready for the ward-surgeon, supplies and clean linen brought over to the ward daily and the soiled linen taken to the laundry, that urine, feces, sputum, and other specimens are taken over to the laboratory daily, care of the stoves, drink-

ing-water, and help in the serving of meals. He must see to it that all patients admitted while he is in charge are sponged off and put to bed between clean sheets. That the patient has drinking-water and a sputum-cup on the little bedside table, and that his temperature, pulse, and respiration are taken. He must be prepared, in the absence of the nurse, to assist at many minor operations, spinal puncture and paracenteses, dressings and enemas. In fact, the ward-master must be a *finale* nurse as well as a good handler of men. These ward-masters are picked from the enlisted personnel. To help them master their many duties, a class was started, where for an hour three times a week some of our medical officers lectured to them and gave them practical demonstrations in bedmaking, giving of enemas, fitting splints, giving first aid, et cetera. In these talks, it was outlined to them that, as the first requisite of the medical department in time of war is the return of men as soon as possible to duty, much depending upon the intelligent cooperation of the ward-master.

At our hospital, we had as many as three chaplains at one time. An Episcopalian, a

Hebrew, and a Roman Catholic chaplain were here for some time, so that all desiring spiritual aid and comfort could obtain it. These chaplains usually were real men's men, good mixers, and well liked by men and officers alike.

While I was here, the Third Liberty Loan was floated. There was no direct soliciting of the A. E. F. The greater part of the Loan, and its pleasing oversubscription, was taken by the people at home. Had there been a campaign here, I have no doubt that a great many bonds would have been sold. There are none of us over here but that are willing and anxious



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Dugout built by men in training for foreign service.

to back ourselves to win, as we have proven by our subscriptions to the first and second loan. It is pleasing, indeed, however, to see the support that our people at home are giving us in the many phases of this war, not the least of which is this matter of buying bonds. The fact that the Third Liberty Loan was oversubscribed makes us who are fortunate enough to be in the Service more proud than ever that we are Americans. I often read of the pride of country that a person has when away from his own land in a foreign country, but, being somewhat of a homeguard, I had never before had the opportunity of experiencing this. I can tell you, though, in



DR. ROBERT C. MURPHY,  
Lieut. M. C., U. S. A.  
Author of the interesting articles on "The Making  
of an Army Medical Officer."

all sincerity and from personal experience, that it is a glorious feeling.

ROBERT C. MURPHY,  
1st Lt. M. R. C.,  
Base Hospital 101.

In France.



# Just Among Friends

A DEPARTMENT OF GOOD MEDICINE AND GOOD CHEER FOR THE WAYFARING DOCTOR

Conducted by GEORGE F. BUTLER, A. M., M. D.

## Origin, Development and Use of the English Language

[Continued from December issue, page 946.]

IT is safe to affirm that all men of intellectual fiber, however imperfect their achievement in letters, desire to write well. Yet, though our literature teems with the noblest examples of felicitous expressions, touching a multitude of topics, and though our institutions of learning lay commendable stress upon English composition, the faculty of clothing our ideas in adequate diction is comparatively rare—preeminence in this art being among the choicest gifts of the gods, given to but few men to attain.

It sounds like a truism to assert that a prerequisite to writing well is, to *think well*. To cultivate a logical sequence of ideas and train the mind to precise methods of coordination and lucidity of reasoning is a momentous task; yet, upon this systematic basis of correct ratiocination, is founded all higher power of appropriate expression. It is readily perceptible that every mental operation is attended by an unconscious formulation of thought potentially utterable in articulated or recorded language. To think aright, therefore, predicates, of necessity, the private training of the intellectual faculties, the concrete energy of which is embodied in writing—an art of which speech is but the handmaid and accessory.

It is difficult to determine how far education, in the sense of academic training, properly subserves the attainment we seek. Not to multiply instances, the consideration of one master-mind—that of Shakespeare—will suffice to show that even rudimentary knowledge acquired in early years may develop into transcendent powers, the evolution of which defies analysis. True, this supreme excellence, which we are wont to term genius, annihilates preconceived notions of that which contributes in the larg-

est degree to the *ars scribendi*. Innumerable instances will occur, however, in which this same deprivation of "schooling" has failed to thwart the innate progress of assimilated thought or, so far as we can discern, impair the excellence of final attainment.

A thoughtful study of eminent authors, indeed, confounds the schoolmen. Hawthorne—to select a notable example—was far from fulfilling the academic requisites of sound learning; yet, he possessed a marvelous gift of utterance, in which the most delicate shadings of human passion, the subtlest phases of imaginative thought, and emotions whose delineation would seem too evanescent to be crystallized in tangible expression were happily portrayed. In a word, he sways us by the supreme mastery of style and his pages glow with the living personality breathing through them and permeating the atmosphere of his creative genius. For, as an illustrious French essayist has said, "style is the man," and, whether in Scott or Dickens or Thackeray, whether in Bolingbroke or Mill, whether in Ruskin, Emerson, Stevenson, Irving or Poe, or, indeed, any master of English expression, the writer's individuality shines forth and vivifies the offspring of his meditation.

Nevertheless, it is obvious that the impress of individuality alone fails to realize the demands of the most engaging style. Carlyle may be regarded as a great thinker rather than a great writer and the Teutonic emphasis of "Sartor Resartus" scarcely is to be accepted as a model of English diction, much as we admire its sturdy resolution, its titanic force, its virility. There must be an objective, as well as subjective, quality in all good writing—a sympathetic consciousness of other hearts and alien experiences, to enlist the reader's regard and captivate his imagination. It is impossible to read Bulwer attentively without experiencing a sense of pleasing, kindred acquiescence in the author's thought and

style. In him, as may be said of Scott, we are aware of the perfect naturalness that constitutes the cardinal motive of successful composition, divergent as are their methods and varied their resources of fiction. They strike the universal, not the personal chord, to which the heart of humanity, joyfully responds. In fact, it may be laid down as a general principle that, the more of universal interest and the less of self is injected into our literary productions, the more acceptable the result.

By this, it is not intended to imply that there should be lack of independent thought and speech, but, rather, that our style should be marked by the suppression of that accented egoism that mars the works of not a few able writers and sensibly detracts from the strength and charm of their performance. Women, it may be observed, are especially prone to this latent or perceptible weakness of intellect, and it is said that only the keen perception of Dickens, among the notable litterati of the time, discerned, by internal evidence, the true authorship of "Adam Bede," although "George Eliot" must be accounted, so to speak, one of the most virile writers of her sex. Better the tempestuous realism, the searchingly vivid, if coarse portrayal of human nature thrust upon us in Kipling, than the invertebrate maunderings of dubious fiction with which we at present are being surfeited and the mendicant appeals prompted by the unwholesome faculty of viewing life through the refracting medium of self-consciousness.

It is difficult to attain this winning simplicity of style, in which art and nature are so happily blended that their separate influences evade detection. We must regard the accomplishment, however, as the crown of literary merit, compatible alike with the most unpretentious effort and the loftiest flights of literary ambition.

Henry James has said of *Madame Recamier* that, to portray the secret of her fascination, were as impossible as the description of a perfume. It may be equally averred of the subtle essence of an engaging style, as of Emerson's or Lowell's, that its rarest spell is evanescent; tangible as are its lofty impress, its exceeding beauty of thought and expression, and its luminous intelligence. We all have felt the easy, refined attractiveness of "Reveries of a Bachelor"; it baffles scrutiny to ascertain pre-

cisely where lies the unobtrusive exercise of the power than binds us to the author's philosophical reflections, investing the simple accidents of daily life—the haunting misery of love, the open fireplace, the reflective pipe of tobacco—with a witchery surpassing definition. Still, we can not fail to perceive that in this particular instance the writer's meditative mood awakens an answering sympathy in the mind of the reader. Not only has the author something to say, but, his speech is freighted with the feelings common to mankind, and all men become responsive to its genial influence. Lamb, Hazlitt, De Quincey, Warner, and a host of others, in varying degree and with individual force, reflect this kindly interest in the fancies and emotions which are the heritage of mankind. They touch the universal heart, and we listen gladly to them.

Reference still remains to be made to the wonderful writings of the illustrious jurists and publicists who have rendered homage to their mother tongue while inculcating the most ennobling principles of truth and freedom. A page of Hamilton, of Webster or Choate leaves upon the mind somewhat the impression of having stood within a classic temple, rendered sacred by the exalted presence of immortal deities and the lingering echoes of oracular wisdom. If their diction be unattainable by ordinary mortals, the allurements of their majesty of thought is none the less real, and of no less vital moment to us in molding the essential elements of the worthiest style. Their peculiar power appertains to the strength of genius; yet, the reflective student may assimilate something of their grandness, something of their fine sincerity and ardor of conviction.

I have cited a few instances of eminent authors, with the definite purpose of assertion that in association with great minds, through diligent perusal of their works, will be found the surest means of acquiring, albeit imperceptibly, the art of logical as well as refined and cultivated expression; in a word, of writing well. The retarding influences of immediate environment can never obliterate the grander impetus given to our thoughts by communion with the accepted masters of English prose. Familiarity with the glorious Elizabethan or the less brilliant although still commanding achievements of the Victorian era of

our literature leaves an indelible impress upon our thoughts and surely is reflected in our speech and "written tongue." "Read few books well" said wise Horne Tooke—the mischief of a prevailing mediocrity of intellectual attainment, as manifested in daily intercourse with fellowmen, and the average production of current literature is, that, as a rule, people read little or nothing of permanent value for higher mental development or the formation of a correct literary style. Better the habit of careful meditation than subservience to the ephemeral writers foisted upon us by a multitude of ignorant purveyors styling themselves publishers. In intellectual, as in all honorable exercise of our highest faculties, quality ever must rank above quantity, and no perfunctory haphazard acquisition of literary knowledge, although praised by the multitude, can justly be comparable with conscientious labor and discernment.

It will be inferred from the foregoing observations that the *art* of creditable writing always is attainable, even under circumstances apparently least favorable to success. The Bible, Shakespeare, "Pilgrim's Progress," "Vicar of Wakefield," the intellectual grace of Irving, Prescott, and Motley, the stately philosophy of Hume, the solidity of Burton, the analytical force of Bacon, together with perhaps a dozen other standard authors, constitute a small, yet, comprehensive library, in which the rarest meditations of the world's later intellects are enshrined. Should classicism claim our attention, a few Greek and Roman authors suffice to shape in our minds the clear, easy refinement of thought and feeling that characterized their epoch. However, our purpose in study must be rationally pursued and all lesser influences banished from the mind, that the crowning result may be commensurate with our ideal. "Pickwick" and "Dooley" may answer well enough for relaxation; but, the august court of letters must have its laureate as well as its clown.

It is pertinent here to refer briefly to an immediate source of literary instruction, from which the careful reader may derive indubitable profit, namely, the editorial pages of our best journals. Notwithstanding the cruel lapses of popular fiction—culpable alike in their motive and their result—a redeeming feature of our current

intellectual life is to be found in newspaper leaders of signal merit, fully equal to style to the best magazine literature, and, from the necessity of condensation, presenting admirable examples of concise, logical reasoning combined with discriminating observation of the leading events of the day. There is, to be sure, a certain "newspaper English," to be regarded as deplorable, for its sins of commission, and little likely to advance the intellectual standard of the reader or to encourage the faculty of praiseworthy expression. The editorial sanctum, however, usually is purged of this baneful element in our daily press, the dominating thought of the journal demanding well-considered and appropriate utterances, and the leading articles frequently disclosing ripened powers of insight and expression unsurpassed by professional essayists. Indeed, although I have credited this superiority only to prominent journals—seeing that they are more cosmopolitan and, therefore, more widely perused—it is a matter of pride to reflect that even the obscure country newspaper is capable of similar excellence, the tone and dissemination of general education in America naturally fostering a broadly diffused, more ample knowledge, and more acute observation.

Having, thus far, regarded the material from a careful consideration of which we learn to command a felicitous style, there remains the vital question as to choice of models in verbal selection. In a language comprising 120,000 words or more, gathered from many sources, ancient and modern, and embodying many civilizations, it is an arduous task to decide how far the incongruous elements of the English tongue shall be impartially combined. A cursory examination shows that the most powerful passages of Shakespeare, at times, are largely exclusively Saxon. Take, for example, the familiar:

"How far that little candle throws his beams!  
So shines a good deed in a naughty world."

Or;

"This, above all, to thine own self be true,  
And it must follow, as the night the day,  
thou canst not then be false to any man."

Or, this advice of Constance to Bertram:  
"Love all, trust a few, do wrong to none."

In all these seven lines, there are but two Latin words, "candle" and "false," the rest



are pure Saxon, imparting, as elsewhere, to Shakespeare's thought indescribable vigor, without abruptness, and beauty of expression, without weakness. "Robinson Crusoe" may properly be defined as an English classic—its phraseology is absolute Saxon from beginning to end.

As a desirable counterpoise to the terse emphasis of the Saxon style, the influence of classical literature has been adduced; the claim being made that the more marked refinement of English diction is traceable to the impress of Latin, through the Norman-French. It can not well be denied that the writers whom the world has been readiest to term "accomplished" have drunk deeply of the Pierian springs and that their classicism adds to the natural uncouthness peculiar to the Saxon idiom a grace and charm which literature never will consent to relinquish.

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Whatever medium we choose, though, let us rigidly forswear the untutored conglomeration of inchoate thoughts suggested by *slang*—a mode of expression destructive of common sense, vulgar in its origin, and a repudiation of that decorous interchange of thought among mankind which it has been the zeal of centuries to establish. Let us, for example, take a bit of Chicagoese: "Wishing to see the elephant, he struck the town; bucked the tiger; rushed the growler; hit the pipe; ran up against a bunco-steerer; and, having blew in his dough, got up on his ear, but, after chewing the rag awhile, came down from his perch and screwed his nut." This, one regrets to say, is readily intelligible to a supposedly educated and refined portion of the community. It is a travesty upon truth to dignify so low a jargon by the appellation of language, and its exaggerated, yet, not unfamiliar, form reveals the depths to which colloquialism may descend.

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There are hints for practical use in the art of writing too obvious to call for ample reference, yet, deserving of passing mention. It is superfluous to say that, without a thorough knowledge of syntax and

familiarity with the canons of composition, no writer can hope to obtain a higher level than that of dull mediocrity. He may toil forever, yet, never emerge from hapless oblivion.

Supposing, however, a facility and pre-vision acquired by proper training, it is always pertinent, before putting pen to paper, to ask ourselves seriously whether we have, really, anything to say that, beyond the paltry sphere of private consciousness, would commend itself to the feeling or intelligence of others.

Again, we should never be deluded by the fond, albeit purblind, approval of friendship, but, rather, court the most uncompromising critic, that we may duly estimate our performance, be rudely torn from cherished mannerisms, and see our idols shattered, so that we may attain "the true faith." It is heroic—this ruthless iconoclasm—but, it does us good to know that confused or fallacious metaphor, incongruity of ideas, the tinsel and glitter of poetic phrasing devoid of perceptible meaning, together with verbosity, redundancy of thought, poverty of language, and evident straining after effect, all preclude the highest attainment. Even the flattering unction of a publisher's check should fail to lure us from strictest scrutiny of our literary ventures. There never was gem so skillfully cut but its facets might shine yet more brilliantly at the touch of a clever lapidary.

In conclusion, I would encourage the belief—too seldom taken at its full value—that there is the attempt at literary composition, an intellectual fervor, a gentle passion for worthy attainments, and an ennobling love of pure art which amply atones for momentary, or even lasting, defeat, and cheers and sustains us in an effort to which we are bidden by the highest behest to which our mental faculties can respond. The transport of worthy endeavor, the glow of studious pursuits, the humblest fruitage of our aspiring toil are, of themselves, sufficient recompense; for, was it not in our listening ear, was it not in some beatific vision that the Angel of the Lord whispered, "Write"?



# Among the Books

## WEBB-JOHNSON: "TWILIGHT SLEEP"

Painless Childbirth in Twilight Sleep in the East. By Cecil Webb-Johnson, M. B., Ch. B., Capt., R. A. M. C. London and Calcutta: Butterworth & Co. 1918. Price \$1.25.

Books on the subject of painless childbirth necessarily must be of general interest, especially as the method of the so-called "twilight sleep" bids fair to emerge from the undeserved contumely that was accorded to it by many theorists and also by men who had tried and studied it either not at all or with a faulty technic. It can not be denied that the dread of the pain of childbirth has become an actual menace to the birth rate, to say nothing of the fact that in many cases, as a result of the pain, fear and worry, many women emerge from parturition physical and mental wrecks. The demand for an unobjectionable method of rendering childbirth painless or nearly so, therefore, is justified and it can not serve any good purpose merely to condemn a method because certain disadvantages are attaching to it. It would be trite to say that everything has its advantages and disadvantages, its light and its shadow; yet, this fact seems to be overlooked by those who demand from a method of painless childbirth that it should be without any disadvantages whatever. The wise physician will, in judging of any method advocated for his consideration, keep an unbiased mind, remembering, as the author says in the introduction of his book that: "There is a principle which is a bar against all information, which is proof against all argument and which can not fail to keep a man in everlasting ignorance, this principle is, contempt prior to examination."

The body of Captain Webb-Johnson's book on "Twilight Sleep in the East" naturally is devoted to a study of the method with the details of which most physicians are fairly familiar but which, nevertheless, will prove good reading. In enumerating and contrasting the disadvantages and advantages of "twilight sleep", the author ar-

rives at the conclusion (p. 92) that most of the disadvantages—which are few, moreover, can be rectified or avoided and that they are insignificant when compared with the advantages of "twilight sleep" in childbirth. The author justly says that, if a medical man has neither the inclination nor the time to give the proper treatment, the only honest course for him to adopt is, to refuse the case, and not give an apology for "twilight sleep", thus bringing discredit on the genuine method.

As for the method to be followed, Captain Webb-Johnson objects to any definite scheduled technic, insisting that each patient should be treated individually in accordance with observation in her own case. He maintains that it is only by the systematic application of the memory test that the minimum effective doses can be gauged and administered. It is not here the place to describe the technic advocated by Captain Webb-Johnson. However, his little book is deserving of careful study by the general practitioner as well as by the obstetrician. It is distinctly a valuable contribution to medical literature.

## OWEN: "TYPEWRITING"

The Secret of Typewriting Speed. By Margaret B. Owen. Chicago: Forbes and Company. 1918. Price \$1.00.

While it hardly can be assumed that any physician will want to fit himself to qualify for the world's typewriting-speed championship, a book giving the personal experiences and opinions of one holding that exalted position must be of general interest. Moreover, the use of the typewriter has become so universal and—fortunately—physicians have taken up typewriting so widely that, being mostly selftaught, they will indubitably receive gratefully a method by which they can fit themselves to use the typewriter properly; correct use of any apparatus being an essential condition for good use.

Miss Owen's little book has all the charm of personal experience, conviction and en-

thusiasm. She writes easily and fluently; often her style is "chatty" and she appeals to her readers as one knowing perfectly what she is talking about, while her own wonderful success is explained and reduced to its simple elements: perseverance, industry, concentration; so that it seems as though anybody must be capable of becoming at least a good operator on the typewriter machine by studying the little book carefully. Miss Owen occasionally indulges in epigrams, and one particularly has attracted the Reviewer's attention, it being so good and true as to be applicable to everybody and to everybody's business. It is: "Never be satisfied with your self! Always be discontented with yourself! Always be discontented with your present success and strive ever for higher things."

#### BLAKISTON'S VISITING LIST

Blakiston's Physicians Visiting List has made its annual appearance for the 68th time, and, in addition to the usual visiting-list, it contains, tables of information on the treatment of asphyxia and apnea; also a dose-table and other useful information. Many physicians find these old-fashioned visiting-lists convenient, and they will want to provide themselves with the new edition for 1919. The book is published by P. Blakiston's Son & Co. Price, according to style, \$1.25 to \$2.50.

#### "THE MEDICAL CLINICS OF NORTH AMERICA"

*The Medical Clinics of North America* for July is a New York number. It contains, among other interesting communications, one by Dr. William H. Park, of the laboratories of the New York City department of health, devoted to practical immunization against diphtheria. Two other important contributions are the one by Dr. Walter L. Niles, on subacute non-tuberculous pulmonary infection, and the one by Dr. Charles B. Slade, on the relation of pulmonary tuberculosis to general practice. At the present time, Dr. E. Libman's clinic on the clinical features of subacute streptococcus (and influenzal) endocarditis in the bacterial stage will prove of special importance.

*The Medical Clinics of North America* is published bimonthly by the W. B. Saunders Company, at the subscription price of \$10.00 per year. It belongs to the

practical and helpful publications that are of great interest to the general practitioner.

#### "PRACTICAL MEDICINE SERIES"

The fifth volume of the "*Practical Medicine Series*" for 1918 contains reviews of the literature on gynecology and on obstetrics. As we look through the book, two articles—on the care of feet in pregnancy and on a new shoe for wear in pregnancy—arrest our attention and impress us as emphasizing a most important point in the hygiene of pregnancy. This is just one instance picked out at random from among the many good things that occupy the reading-pages of this little volume.

Volume VI of "*The Practical Medicine Series*" for 1918 is devoted to pharmacology and therapeutics, being edited by Dr. Bernard Fantus, and to preventive medicine, this section being edited by Dr. Wm. A. Evans. The volume sells separately for \$1.60.

The "*Practical Medicine Series*" is issued in 8 volumes during each year and covers the entire field of medicine and surgery. Each volume is complete on the subject of which it treats for the year prior to its publication. The price of the series of 8 volumes is \$10.00; the present volume sells separately at \$1.60. It is published by the Year Book Publishers, Chicago.

#### KOLL: "MALE URETHRA"

Diseases of the Male Urethra. By Irvin S. Koll, B.S., M. D., F.A.C.S. Illustrated. Philadelphia and London: The W. B. Saunders Company. 1918. Price \$3.00.

Here is an interesting little monograph on diseases of the male urethra, including impotence and sterility, which not only is to serve genitourinary specialists, but, also presents much useful information for the general practitioner. The book is well gotten up, beautifully illustrated, and the subject is well presented.

#### DEANE: "GYMNASTIC TREATMENT"

Gymnastic Treatment for Joint and Muscle Disabilities. By Brevet Col. H. E. Deane, R.A.M.C. Illustrated. London: Oxford University Press. 1918. Price \$2.50.

Here is a little volume that describes, in brief and concise language, various exer-

cises that are suitable for the treatment and overcoming of joint and muscle disabilities. The exercises are those employed in various British war hospitals for the purpose of fitting wounded soldiers for discharge and for the resumption either of their military duties or, then, of useful civilian occupations. There are several interesting illustrations and, altogether, the little book is well worth while.

**LOWRY: "WOMANHOOD"**

Preparing for Womanhood. By Edith B. Lowry, M. D. Chicago: Forbes & Company. 1918. Price \$1.00.

Dr. Edith B. Lowry has distinguished herself during the last few years by producing some of the most acceptable books on sex hygiene and other related topics, as they may be taught to boys, to girls, to women or to men. The present book is intended for girls from fifteen to twenty years of age, and discusses health, home-making, and everything that girls need to know in order to become happy and healthy women.

The author's treatment of her topics always is simple and straightforward, yet in dignified and suitable language. The Reviewer has always been favorably impressed on reading her various books and recommends this latest one from Doctor Lowry's pen cordially.

**WARBASSE: "SURGICAL TREATMENT"**

Surgical Treatment: A Practical Treatise on the Therapy of Surgical Diseases for the Use of Practitioners and Students of Surgery. By James Peter Warbasse. In Three Volumes with 2400 Illustrations. Vol. II. Philadelphia: W. B. Saunders Company, 1918. Price \$30.00 per set.

The second volume of "Surgical Treatment", which as the Reviewer has announced before is to be completed in three volumes, deals with the treatment of injuries and diseases of the head, of spine, of neck, of thorax, of breast and abdomen. Like its companion, Volume I, the book is mechanically perfect, well printed, well and profusely illustrated and the text is in accordance with the latest and most approved methods. While much of the material nec-

essarily is highly technical and specialized, the Reviewer is impressed with the fact that the general practitioner will find in this work much serviceable guidance for the problem with which he has to deal in his practice.

**PRINCE: "ROENTGEN TECHNIC"**

Roentgen Technic (Diagnostic). By Norman C. Prince, M. D. With seventy-one original illustrations. St. Louis: C. V. Mosby Company. 1917. Price \$2.00.

This small volume has been prepared particularly for those general practitioners who have seen fit to install x-ray equipments along with the numerous other apparatus necessary in helping them to best care for those who come under their observation.

It is to be kept in mind that the book is devoted entirely to the diagnostic use of the Roentgen rays. It is freely illustrated and contains detailed directions for preparing the patient for examination.

**JOHNSON: "FILLING TEETH"**

Principles and Practice of Filling Teeth. By C. N. Johnson, M.A., L.D.S., J. D.D.S. Illustrated. Philadelphia: P. Blakiston's Son & Company. 1918. Price \$3.00.

This volume, of course, will appeal particularly to our dentist friends. The Reviewer confesses to being entirely unable to judge of its excellence. However, he is inclined to take on faith what this particular author says.

**GULICK: "MENTAL DISEASES"**

Mental Diseases: A Handbook Dealing with Diagnosis and Classification. By Walter Vose Gulick, M. D. Illustrated. St. Louis: C. V. Mosby Company. 1918. Price \$2.00.

The Reviewer can do no better than reproduce the introduction to this book by Dr. W. T. Williamson, which is as follows:

"This little book is no superfluity; born of the wants we all have for concise, digested information, it institutes a response to that need. Doctor Gulick felt the demand as others have, but, he happily responded. The physician in court, or conducting office or public examinations of the insane, or

unexpectedly called upon for diagnosis in private practice, will accept this book with relief. It is original and pleasing, not a mere compilation, and has much pure Anglo-Saxon directness and clearness. It should be welcome to the profession."

#### **"ABSTRACTS OF WAR SURGERY"**

Abstracts of War Surgery: An Abstract of the War Literature of General Surgery that has been Published Since The Declaration of War in 1914. Prepared by the Division of Surgery, Surgeon-General's Office. St. Louis: C. V. Mosby Company. 1918. Price \$4.00.

The substance of this book was prepared originally for the Division of General Surgery of the Surgeon-General's office, for use of instructors in the Army Surgical Schools and of the surgical chiefs of the war hospitals. Its wider distribution in printed form makes available to the members of the medical profession many of the valuable lessons in the past four years.

#### **WITTICH: "INFORMATION FOR THE TUBERCULOUS"**

Information for the Tuberculous. By F. W. Wittich, A. M., M. D. St. Louis: C. V. Mosby Company. 1918. Price \$1.00.

This book answers the questions which frequently arise and which are constantly asked by hundreds of patients when first learning that they are tuberculous and during the course of treatment. The author's vast experience in the field of tuberculosis, gained first while a patient of no light infection at Saranac Lake, and later as physician and superintendent to some of the leading sanatoriums for tuberculosis in the country, has enabled him to get very close to the patient and to understand what is wanted in the way of information.

#### **RINGER: "CLINICAL MEDICINE FOR NURSES"**

Clinical Medicine for Nurses. By Paul H. Ringer, A. B., M. D. Illustrated. Philadelphia: F. A. Davis Company. 1918. Price \$2.00.

The author attempts to present the information on medical diseases, as their knowledge is required by nurses, in sufficient detail for the purpose without, on the

other hand, dealing with them as minutiously as do textbooks on medicine. The student is taught what and how to observe and interpret, it being kept in mind, though, that the nurse is to act as aid to the physician, not as an independent medical advisor. This little book strikes us as well written and we believe that the intention of the author has been fully carried out.

#### **PAGE: "A-B-C OF AVIATION"**

The A-B-C of Aviation. By Captain Victor W. Pagé, Sig. R. C., A. S. New York: The Norman W. Henley Publishing Company. 1918. Price \$2.50.

To physicians who are interested in aviation, Captain Pagé's latest book will be welcome. The author is remarkably well qualified to write on this subject through long personal experience and for which he was fitted previously with close study and knowledge of motors and horseless vehicles.

#### **ADLER: "HISTOPATHOLOGICAL TECHNIC"**

Compendium of Histo-Pathological Technic. By Emma H. Adler. New York: Paul B. Hoeber. 1918. Price \$1.25.

This little compendium is intended to supply the student untrained in laboratory work with a brief and handy account of the methods that have been found most useful by the author. It will primarily prove of service to the beginner and especially to those physicians who without much laboratory experience desire to take up this very fascinating work.

#### **"UNITED STATES ARMY X-RAY MANUAL"**

United States Army X-Ray Manual. Authorized by the Surgeon-General of the Army. Prepared under the Direction of the Division of Roentgenology. 219 Illustrations. New York: Paul B. Hoeber. 1918. Price \$4.00.

The fact that this x-ray manual is authorized by the Surgeon-General of the Army and has been prepared under the direction of the Division of Roentgenology is sufficient commendation as a strong introduction. The manual may be accepted as being in accordance with the best that is known on the subject.



# Condensed Queries Answered

While the editors make replies to these queries as they are able, they are very far from wishing to monopolize the stage and would be pleased to hear from any reader who can furnish further and better information. Moreover, we would urge those seeking advice to report their results, whether good or bad. In all cases please give the number of the query when writing anything concerning it. Positively no attention paid to anonymous letters.

## Answers to Queries

ANSWER TO QUERY 6403.—“Formication”. Regarding Query 6403 in the October number, page 802, Dr. L. M. Young, of San Francisco, California, suggests that the symptoms of formication described by our correspondent tally with those of “urticaria fugax”, or flying urticaria. This, Doctor Young adds, is the creeping, fleeting sensation that might suggest vermin (“cooties”), but, which, in his opinion, would be due to food idiosyncrasy, especially to pork products, or to the continued ingestion of meats in general.

In recent years, we have become familiar with the urticaria developing through an intolerance of certain food substances, more especially those of vegetable origin, the most manifest instances being an intoler-

ance of strawberries, tomatoes, and various similar articles. The intolerance of eggs and even that of milk naturally must be classed in the same category. Since this anaphylaxis may manifest itself in part in the development of a severe urticaria, sometimes with violent itching and distressing sensations generally, it is fair to conclude that the same occasionally may occur very much attenuated in degree in cases where either the intolerance to certain foods is only very slight or in which very small amounts of such substances have been partaken of. The Query Editor believes that Doctor Young's tentative diagnosis is a very probable one and should like to receive the expression of other opinions on the subject.

## Queries

QUERY.. 6409.—MORE INFORMATION WANTED.—E. G. H., Iowa writes as follows: “I have a patient who does not complain of anything except of a pale skin. The blood, according to examination, is good.” And then the doctor adds, “Kindly advise me as to diagnosis and treatment.”

Now, this is where the Query Editor enters his “kick.” So many physicians make similar requests and many of them demand from us even more impossible things, such as, for instance, to advise them concerning “the best treatment for goiter”, the “best treatment for indigestion”, and similar problems of undefined nature. All this despite our constant endeavor to impress upon our readers' minds the futility of attempting to treat disease-names in-

stead of studying their patients' symptoms characteristic of certain diseases.

The Query Editor is glad to receive requests for help and counsel. It gives him much pleasure to study and enter into the problems presented to him by his correspondents and to advise them to the best of his ability. But, the Query Editor is only a physician. He is not the Almighty and he can not *sense* just what ails your patients, doctor, nor can he give you intelligent advice unless you describe clearly and in detail the conditions observed by you.

When asking for aid in any problem that may puzzle you, remember that the Query Editor can not see your patient, but, that he must depend upon you for a description of his patient's condition. Make it complete.

Remember that we can not see your patients, thus losing your advantage. Therefore, tell us all you know about your cases. Only then can the Query Editor's advice be worth anything at all.

QUERY 6410.—W. N. H., Illinois, writes about a married woman, age twenty-nine years, father and mother both alive and in good health. She has three adult brothers working in a coal mine and part of the time on a farm. Nativity, American. Height, 5 feet; weight, 100 pounds; physique, fairly well developed, but, small; complexion, light. Married six or seven years; never been pregnant.

Subjective symptoms: Very severe headaches, just before, during or following menstruation; headache begins in back of head and extends all over her head. Complaints of feeling languid and weak. Lost 7 pounds in weight in the last six months. Short of breath on the least exertion; no appetite; complaints of indigestion, insomnia, hot flashes and free sweating; never rested, always tired; dizziness; pain in small of back.

Objective symptoms: color, normal, perhaps a little anemic. Tongue clear; teeth in good condition; no eye trouble; ovaries tender; vaginal examination reveals nothing but tenderness; says coitus is painful. Heart and lungs normal; bowels constipated. Urinary examination a month ago; specific gravity 1040, cloudy, slightly acid, no sugar or albumin; amount excreted in twenty-four hours, one pint.

"Treatment: I endeavored to increase the urinary output by insisting upon drinking all the water she could, and gave her a buchu, juniper, and potassium acetate mixture, also iron, quinine, and strychnine. I regulated her bowels with the Hinkle tablet, and gave sodium bromide for nervousness.

"Urinary examination a week later: total amount one quart; specific gravity 1030; color light-straw, cloudy; reaction, acid; no albumin or sugar. She claims to feel somewhat better; headache not so severe, appetite slightly improved. This urinary condition did not look right to me, hence I sought your assistance. Any suggestions you now may make will be appreciated. I will say that my provisional diagnosis was, neurasthenia, but, from your laboratory-report, I am inclined to believe there may have been, some years ago, an acute

urethritis and that the symptoms there now are the sequels."

The principal impression made by a reading of this excellent account of your patient is that of a profound toxemia existing.

We have here a woman, twenty-nine years old, 5 feet tall, weighing 100 pounds, which is somewhat under weight; although married about six years, she has never been pregnant. There is, evidently, some sexual irregularity, which may or may not be purely mental; yet, the fact that conception has never occurred makes us suspect the possibility of a very tight os uteri or, perhaps, a malposition of the womb. The tenderness of the ovaries may be owing to an insufficient menstrual flow, leaving the ovaries congested and unrelieved. By the way, you do not give any information on the character of the menses themselves, nor do you say whether there are abdominal pains during those periods.

The patient is constipated, has no appetite, does not sleep, always feels tired. She is dizzy, has hot flashes, yet, heart and lungs are found normal. These symptoms are of toxic nature, and the toxemia may be intestinal in origin. On the other hand, they may be of bacterial source, since the uranalysis disclosed many colon-bacilli and many staphylococci.

It would be interesting to know something about the mentality of this patient. Is she fairly well educated? Is she intelligent? Does she make any subjective observations and comments concerning her condition? Is her married life happy, that is, are she and her husband congenial? Are his habits good? All these points may have to be considered.

Now, as to the treatment of this patient, we believe the first requirement is, to secure a complete and thorough emptying of the bowels. Better start her on calomel and podophyllin, 1-6 grain each dose every hour until six doses are taken. Then a full dose of a laxative saline say, one tablespoonful in much water. This dose may be called for two or three times a week for a week or two, until the constipation is fully relieved; then the bowels may be kept clean by means of phenolphthalein tablets in sufficient dosage, always trying to reduce the dose to the smallest amount required.

In the meanwhile, the diet should be simple and easily digested. Milk, of course, is a good article of diet, but, it should be

made more acceptable by adding a Bulgarian-bacillus culture; this, for the purpose of reducing the probable intestinal fermentation caused by bacterial action.

The intake of fluids during the twenty-four hours should be 4 quarts a day for some time. We do not believe this would produce an excessive strain upon the urinary organs, for the reason that there is no evidence of any organic changes in the kidneys.

The best articles of food to be prescribed are, in addition to milk, cereals, including bread; starchy foods, fats (butter), meat, and eggs in moderation, much fruit, preferably fresh. The patient should be encouraged to select her food with a view to stimulating the appetite. It might be advisable to have her invited out frequently, because, as you know, doctor, a woman who cooks her own meals often does not care to eat them, not because they are not good, but, because she had to cook them and, therefore, wants to be through with them.

It is probable that a course of nuclein solution, preferably administered hypodermically, would help this patient materially. Give the contents of one ampule twice a week. Nuclein solution that is made especially for hypodermic injections produces neither swelling nor reaction; it is borne well and exerts a very satisfactory influence upon the debilitated organism.

It is possible that the severe headache ushering in and accompanying the menstruation may be moderated or even relieved by a course of Buckley's uterine tonic pills, three times daily for a month, preceding the menstrual period. It also is possible that, after the complete cleaning out here advised, this headache will not make its appearance at all.

We have the impression that this patient requires a whole lot of encouragement and suggestive treatment. If, as we assume, she has absolute confidence in you, you will be able to do very much for her by assuming a calm and confident attitude, assuring her that you will be able to benefit her, without, however, promising a definite cure, even though we do believe that this woman can be cured.

We should like to be quite certain of the absolutely normal condition of heart, lungs, and uterus. Please, repeat your examination two or three times, if necessary, listen to the chest-organs at intervals, with the

patient sitting up and lying down; ascertain her blood pressure, both systolic and diastolic and inform us of any possible nervous symptoms, excessive nervousness in speech, possible twitching of hands and eyelids, and of fussiness. Does she look you straight in the eye, or do her eyes shift during conversation? What is the condition and reactivity of the pupils?

There are so many things that we should look for if we had the patient before us that a complete questionnaire would constitute a lengthy article; however, we believe that we have made sufficient suggestions for you to go by and to start your patient on the road to recovery.

It may be possible to counteract the existing bladder infection by administering a bacterin containing the offending bacteria (coli and staphylococci). Undoubtedly, a tonic, possibly, iron citrate hypodermically, also might be of great value. We have learned to depend upon this in certain cases, in preference to the pills given by mouth, although in your case very probably the combined arsenates with nuclein would prove very useful, by creating a feeling of wellbeing, improving the appetite and the condition of the blood.

We have been tempted to enter into the discussion of this case at rather unusual length for the reason that these patients suffer so much—needlessly; that their problems can be solved by careful and persistent study, and that a physician who devotes himself single-mindedly to the necessary, although onerous, work, surely will be successful.

You can not expect to derive adequate financial returns from your attendance upon a case like this, because the patients rarely realize how much work it involves. Nevertheless, there will be satisfaction for you in knowing that you have accomplished something definite.

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QUERY 6411.—J. L. D., Oklahoma, desires to know the reasons for the backward development of a little American girl three years of age, now under his care. Her delivery was natural. "She has had none of the diseases of childhood—whooping-cough, mumps, scarlet-fever—except measles; and I am not certain that she had that. Indeed, she has had no illness except a severe pneumonia when <sup>she</sup> was old, which resulted in <sup>her</sup> death. Has no heart lesion or

no years  
recovery.  
in favor

able. She has been costive throughout life, thus necessitating some sort of aperient. But, the parents are very intelligent and never let her go more than two or three days without resorting to whatever means may be necessary to secure action. Often they must give two or more tablespoonfuls of castor-oil or a compound cathartic pill to get results. They used the compound cathartic pills when the child was only two years of age, this insuring only one action.

The girl is well nourished, well developed physically, plump, but, not too fat, and has a fair skin and perfectly healthy appearance. She has always had a good appetite and good bodily nutrition.

"Now as to her intellectual development: the little girl first sat alone, unpropped, at about eighteen months, but, first stood alone and walked only recently, say, at about 2½ years. But, even now, she walks very little and is quite awkward, seeming to have little control of the ankles. She has never talked or uttered any word except "pa, pa, pa, pa, pa," and does not seem to realize what this means. She seems, however, to be able to recognize her parents. Her head makes a constant nodding movement, as if negating some question. This has been observed at least for the past two years; but does not occur during sleep.

"Chorea is one condition suggested to me by the nodding movement of the head.

"The child does not seem at all nervous; is not fretful, peevish, or fractious, but, is what one would term a 'good' child.

"The family history is negative. I have found nothing in the way of any specific diseases, insanity or anything that I think would cast light upon this case—not on either side of parentage, in uncles or aunts, unless this might afford a clue, that the mother and all her mother's sisters have a slow and 'long' speech, as one would say.

"The parents are at the head of the society of their little town, the father being a banker, and are anxious to know whether anything can be done to alter the condition."

The problem that you submit to us relative to your little patient is a difficult one, because we labor under the disadvantage of not being able to see the child.

From the history and account that you give, we are under the impression that the child is suffering from the results of hypofunction of the thyroid gland, possibly also from a deficiency of some of the other hormones. A slow development, physically and intellectually, and an apparent inability to realize and appreciate things often is associated with thyroid deficiency and is seen most pronouncedly in cretins. This view seems to be supported by the apparent sluggishness of the bodily functions in general, since, for instance, it calls for what might be called heroic treatment to get the baby's bowels to move.

We suggest that you put this child on thyroid medication, starting with 1/12 grain doses (tablets) of thyroid gland, which may be given twice a day, carefully watching for untoward effects. These would take the form of rapid heart-action and manifest nervousness. If, at the end of a week this dosage is borne readily, you might increase it to three doses daily; then we should continue these three daily doses, but, increase the dose by 1/12 grain in the twenty-four hours after every week.

We believe that possibly this treatment may have a favorable effect, secondarily, upon the function of the bowels. We confidently expect it to influence decidedly the physical and mental development. We are advocating very small doses to start with and an extremely slow increase in these doses, for the reason that we desire to avoid any possibility of excessive function or stimulation.

The positive results of this treatment would take the form of greater independence in action, for instance, of walking; also in a more rapid intellectual development, possibly a stimulation of the speech-centers.

We should be very much interested to hear from you again, in a month or two from now, concerning this little patient.

